

CITY OF



CARLISLE

REPORT

ON THE

Sanitary Administration

OF THE

CITY OF CARLISLE

FOR THE YEAR

1938

BY

ALLAN SEMPLE,

M.B., Ch.B. (Glasgow) ; D.P.H. (Bristol),
MEDICAL OFFICER OF HEALTH,
SCHOOL MEDICAL OFFICER,
CHIEF TUBERCULOSIS OFFICER, &c.

CARLISLE :

James Beaty & Sons, Ltd., Lonsdale Street,
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PUBLIC HEALTH STAFF.

Medical Officer of Health, School..	ALLAN SEMPLE, M.B., Ch.B., D.P.H.
Medical Officer, Chief Tuberculosis Officer, &c., &c.	
Assistant Medical Officer of Health,..	JAMES C. B. CRAIG, M.D., D.P.H.
Tuberculosis Officer, and Assistant School Medical Officer	
Assistant School Medical Officer..	Miss E. D. HUNTER-CRAIG, M.B.,
and Assistant Medical Officer	Ch.B., L.M.
(M. & C. W.)	
Assistant Medical Officer (V.D.) ..	ALEX. C. B. McMURTRIE, M.D.,
(part-time)	F.R.C.S., D.P.H.
Public Vaccinator (part-time)	.. JAMES LAMBERTON, M.B., Ch.B.,
	D.P.H.
District Medical Officer (temporary)	.. RICHARD CRAVEN, M.B., Ch.B.
(part-time)	
Consulting Obstetrical Surgeon ..	A. W. PURDIE, M.B., Ch.B.,
(Corporation Maternity Home),	F.R.F.P.S., M.C.O.G.
&c. (part-time)	
Dental Surgeon .. .. .	.. T. W. GREGORY, L.R.C.P.S., L.D.S.
Veterinary Inspector (part-time) ..	.. R. CRAIG ROBINSON, M.R.C.V.S.
Sanitary Inspector, and Inspector..	*†‡WALTER HANSON
under Food and Drugs (Adultera-..	
tion) Act, Shops Acts, &c.	
Senior Assistant Sanitary Inspector ..	*†Ed. S. BROADHEAD
Housing Inspector .. .. .	.. **||§E. BOADEN
Assistant Sanitary Inspector .. ..	.. **G. RAWLINSON
Health Visitors .. .. .	.. Misses H. M. HILL, J. G. SMITH, C.
	STORDY, M. E. SMITH
Nurse in charge of School Clinic and..	Miss M. E. GLOYNE
Tuberculosis Dispensary	
Tuberculosis and School Nurses ..	.. Misses M. B. COULTHARD, M. I.
	SAUNDERS, E. R. FERGUSON, L.
	SHAW
Matron of City General Hospital ..	.. Miss E. M. BELLAMY
Matron of Maternity Hospital ..	.. Miss M. L. WEBSTER
Matron of Infectious Diseases	.. Miss A. S. McLEAN
Hospital	
Lay Administrative Officer .. ..	.. W. V. MORRIS
Lady Almoner .. .. .	.. Miss M. L. FINCH, B.A., Cert. I.H.A.
Clerks .. .. .	.. L. OATES, S. STYTH, F. N. BELL,
	C. F. MACKERETH, G. SMITH;
	Misses M. PURDAM, A. WILSON,
	M. GRAHAM, M. H. BOWMAN
Ambulance & Disinfecting Officer B. SMITH
Superintendent of Public Slaughter-..	aA. R. MITCHELL,
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Public Analyst (part-time) CYRIL J. H. STOCK, B.Sc., F.I.C.
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Bacteriologists (part-time) THE PUBLIC HEALTH LABORATORY,
	MANCHESTER (Prof. H. B. MAIT-
	LAND), AND THE CUMBERLAND
	INFIRMARY PATHOLOGICAL LABO-
	RATORY, CARLISLE (Dr. J. STEVEN
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* Sanitary Inspectors' Certificate, R.S.I.

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a Meat Certificate R.S.A. (Scotland)



To His Worship, the Mayor, and to the Aldermen and Councillors of the City and County Borough of Carlisle,

MR. MAYOR, LADIES AND GENTLEMEN,

I have the honour of submitting the Annual Report on the Health Services and Sanitary Administration of the City during the year 1938.

In view of the many emergency matters calling for immediate attention, I am unable to summarise the report in detail, but there are some features which call for special mention.

The Infant Mortality rate is the lowest ever recorded in the City, as is also the Death Rate from Tuberculosis. The general Death rate is the lowest for many years ; while the Birth rate continues favourable.

With the exception of Scarlet Fever, the City has been free from epidemics, and the continued low incidence of Diphtheria is particularly gratifying.

The Housing conditions are reported on in considerable detail, as this matter has frequently come under discussion during the year.

A special section on the sanitary conditions in schools is included, and will no doubt receive attention from the Education Committee.

The City's water supply has received special attention, numerous investigations being made throughout the year to ensure its purity.

Slight changes in procedure relating to milk sampling have been made, more attention being directed to ungraded milks. It will be noted that all milk samples were tubercle free.

A less satisfactory feature is the comparatively high Still-Birth rate, and the reason for this has not yet been ascertained.

Staff changes include the appointment of a Lady Almoner, whose work has considerably facilitated the recovery of charges, and reduced friction in connection therewith.

The appointment of Dr. Purdie, jointly with the Cumberland County Council and the Cumberland Infirmary, as Obstetrical Surgeon, was made in July.

I desire to thank all the members of my staff for their assistance in the work of the Department and the preparation of this report.

I am,

Your obedient Servant,

ALLAN SEMPLE,

Medical Officer of Health.

June, 1939.

STATISTICS AND SOCIAL CONDITIONS.

General Statistics.

Area (acres)	4,488
Population, Estimate of Registrar-General.. ..	60,220
Number of Inhabited Houses (end of 1938) according to Rate Books	17,838
Rateable Value	£405,378
Sum represented by a Penny Rate	£1,608

Extracts from Vital Statistics of the Year.

Live Births—	Total.	M.	F.	
Legitimate ..	1059	532	527	
Illegitimate ..	63	23	40	
				Birth-rate, 18.6

Still-births ..	53	27	26	
				Rate per 1,000 births, 45.1

Deaths	689	336	353	
				Death-rate, 11.4

Deaths from diseases and accidents of pregnancy and childbirth—

From Sepsis	—
From other causes	5

Death-rate of Infants under one year of age per 1,000 live births—

Legitimate	45.3
Illegitimate	63.4

Total, 46.3

Deaths from Whooping Cough (all ages)	2
„ Diarrhoea (under 2 years of age)	5

Social Conditions.

The chief sources of industry are the London, Midland, and Scottish, and the London and North Eastern Railway groups, which have their termini in the City. There are also engineering, printing, and lithographic works; textile, dyeing, and bleaching works; carpet factories, breweries, tanneries, felt-hat works, biscuit and confectionery factories, and smaller miscellaneous trades, and an extensive trade is carried on in cattle and timber. There is a good deal of female labour employed in textile factories, and also in connection with lithographic, biscuit, carpet, sweet, and several other industries.

Population.

The estimate of the population at mid-year, 1938, supplied by the Registrar-General, was 60,220, and this figure has been used in making the various calculations in this report.

Births.

LIVE BIRTHS.

The number of live births registered during the year was 1,122, an increase of 84 on the figure for the previous year, and the live birth-rate is 18.6 per 1,000 of the population, or an increase of 1.2 on the figure for 1937.

The live birth-rate for the whole of England and Wales during 1938 was 15.1 per 1,000. The rate for the 126 great towns, to which classification Carlisle belongs, was 15.0 per 1,000, and for the 148 smaller towns of England and Wales 15.4 per 1,000.

STILL-BIRTHS.

The number of still-births registered during the year was 53, and the still-birth rate is 0.88 per 1,000 of the population. In 1937 the rate was 0.87.

The still-birth rate for the whole of England and Wales during 1938 was 0.60 per 1,000. The rate for the 126 great towns, to which classification Carlisle belongs, was 0.65 per 1,000, and for the 148 smaller towns of England and Wales 0.60 per 1,000.

Year	Number of Live Births Registered			Per 1,000 of the population
	Males.	Females.	Total.	
1934	444	459	903	15.4
1935	466	451	917	15.6
1936	457	470	927	15.7
1937	502	536	1038	17.4
1938	555	567	1122	18.6

Table showing details of the Live Births in the several Wards, 1938.

QUARTER ENDED.	STANWIX AND ETERBY	RICKERGATE	AGLIONBY	GREYSTONE	ST. NICHOLAS	CURROCK	DENTON HOLME	ST. CUTHBERT'S	CALDEWEGATE	NEWTOWN & BELLE VUE	TOTALS FOR CITY
March 31 ..	13	24	24	43	19	38	21	22	29	60	293
June 30 ..	21	21	17	64	21	44	24	15	28	45	300
Septemb'r 30	20	23	6	57	16	39	15	24	17	42	259
December 31	24	10	6	54	23	34	23	22	23	51	270
Totals ..	78	78	53	218	79	155	83	83	97	198	1122

ILLEGITIMATE LIVE BIRTHS.

The number of illegitimate live births registered was 63, or 56.1 per 1,000 of the total births. This shows a decrease of 7 upon the figures for 1937.

In 28 instances, or 44.4 per cent. of the illegitimate live births, the mother was not a resident of the City.

Table showing details of the Illegitimate Live Births in the several Wards, 1938.

	Stanwix and Eterby	Rickergate	Aglionby	Greystone	St. Nicholas	Currock	Denton Holme	St. Cuthbert's	Caldewgate	Newtown & Belle Vue	Totals for City
Males ..	2	4	—	8	1	3	—	1	1	3	23
Females ..	3	6	2	14	—	3	1	1	3	7	40
Totals ..	5	10	2	22	1	6	1	2	4	10	63

Deaths.

The total number of deaths registered was 845, as compared with 911 in 1937. 21 deaths occurred of persons belonging to the City in Institutions and other places away from Carlisle, while the deaths of 177 persons not belonging to the City occurred in public institutions and other places within the City. Excluding the latter figure, and adding the deaths of Carlisle residents which occurred in other districts, a net figure of 689 remains, which is equal to a crude death-rate of 11.4 per 1,000 of the estimated population at all ages, against 12.9 per 1,000 in 1937.

The corrected death-rate for the City, which is obtained by multiplying the crude death-rate by the areal comparability factor supplied by the Registrar-General, viz., 1.03, is 11.7 per 1,000 of the estimated population living at all ages.

The death-rate for the whole of England and Wales during 1938 was 11.6 per 1,000. The rate for the 126 great towns, to which classification Carlisle belongs, was 11.7 per 1,000, and for the 148 smaller towns of England and Wales, 11.0 per 1,000.

Table showing details of Deaths of Residents in the various Wards, 1938.

Quarter Ended	Stanwix & Etterby	Rickergate	Aglionby	Greystone	St. Nicholas	Currock	Denton Holme	St. Cuthbert's	Caldegate	Newtown & Belle Vue	Totals for City
March 31 ..	15	11	22	25	18	33	15	21	21	31	212
June 30 ..	8	7	19	32	14	25	20	10	10	20	165
Septemb'r 30	5	12	14	17	15	19	18	13	10	18	141
December 31	12	12	12	19	13	20	10	21	14	38	171
Totals ..	40	42	67	93	60	97	63	65	55	107	689

Table showing the number of Deaths at all Ages and at several age periods, 1938.

	All Ages	Under 1 Year	1 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and up-wards
No. of Deaths	689	52	20	14	12	60	163	368

The following Table shows the principal certified causes of death during 1938, and a comparison with those of 1937.

DISEASE	1938	1937
Measles	4	—
Whooping Cough	2	1
Diphtheria	3	1
Influenza	10	26
Pulmonary Tuberculosis & Phthisis	30	34
Other forms of Tuberculosis	5	6
Cancer	83	82
Diseases of Nervous System	53	64
Diseases of Heart and Blood Vessels	243	288
Bronchitis	23	37
Pneumonia	27	31
Other Diseases of Respiratory System	7	14
Diarrhoea and Enteritis (under 2 years of age)	5	2
Other Diseases of Digestive System	28	29
Diseases of Genito-Urinary System	33	32
Premature Birth and Diseases of Early Infancy	31	29
Old Age	20	21
Violence (all forms, including Injuries and Accidents)	26	34

The following Table sets out the Cause and the Ages at Death of 689 persons belonging to the City :—

CAUSES OF DEATH.	NETT DEATHS AT THE SUBJOINED AGES OF " RESIDENTS " WHETHER OCCURRING WITHIN OR WITHOUT THE CITY									TOTAL DEATH WHETHER OF " RESIDENTS OR " NON-RES- IDENTS " IN INSTITUTION IN THE CITY.
	All Ages	Under 1 year.	1 and under 2.	2 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and up- wards	
1	2	3	4	5	6	7	8	9	10	11
All Causes { Certified ..	634	45	7	11	13	12	56	153	337	369
{ Uncertified ..	55	7	1	1	1	—	4	12	29	11
Typhoid and Paratyphoid	—	—	—	—	—	—	—	—	—	—
Fevers	—	—	—	—	—	—	—	—	—	—
Measles	4	1	—	3	—	—	—	—	—	3
Scarlet Fever	2	—	1	—	1	—	—	—	—	2
Whooping Cough	2	2	—	—	—	—	—	—	—	1
Diphtheria	3	—	—	1	2	—	—	—	—	2
Influenza	10	—	—	—	—	—	1	2	7	—
Encephalitis Lethargica	—	—	—	—	—	—	—	—	—	—
Cerebro-Spinal Fever	—	—	—	—	—	—	—	—	—	—
Tuberculosis of Respiratory System	30	—	—	—	2	4	10	11	3	23
Other Tuberculous Diseases	5	—	—	1	1	1	2	—	—	10
Syphilis	2	1	—	—	—	—	—	1	—	1
General Paralysis of Insane, Tabes Dorsalis	3	—	—	—	—	—	—	2	1	2
Cancer, Malignant Disease	83	—	—	—	—	—	8	29	46	37
Diabetes	5	—	—	—	—	—	1	—	4	7
Cerebral Hamorrhage, etc.	46	—	—	—	—	—	—	17	29	18
Heart Disease	143	—	—	—	—	—	9	34	100	51
Aneurysm	—	—	—	—	—	—	—	—	—	—
Other Circulatory Diseases	101	—	—	—	—	—	1	13	87	7
Bronchitis	23	2	—	—	—	—	—	4	17	3
Pneumonia (all forms)	27	7	3	2	1	—	1	8	5	11
Other Respiratory Diseases	7	—	—	—	—	—	—	4	3	4
Peptic Ulcer	8	—	—	—	—	1	2	3	2	18
Diarrhoea	5	3	2	—	—	—	—	—	—	3
Appendicitis	2	—	—	—	1	1	—	—	—	8
Cirrhosis of Liver	3	—	—	—	—	—	—	1	2	3
Other Diseases of Liver, etc.	3	—	—	—	—	—	—	1	2	6
Other Digestive Diseases	18	1	2	—	—	1	6	6	2	28
Acute and Chronic Nephritis	27	1	—	—	1	1	2	6	16	6
Puerperal Sepsis	—	—	—	—	—	—	—	—	—	—
Other Puerperal Causes	5	—	—	—	—	—	5	—	—	10
Congenital Debility, Premature Birth, Malformations, etc.	31	31	—	—	—	—	—	—	—	29
Senility	20	—	—	—	—	—	—	1	19	8
Suicide	6	—	—	—	—	—	—	—	—	—
Other Violence	20	—	—	2	5	1	2	2	1	1
Other Defined Causes	41	3	—	3	—	2	2	18	13	47
Causes Ill-defined or unknown	4	—	—	—	—	—	2	—	2	2
TOTALS ..	689	52	8	12	14	12	60	165	366	380

The following Table shows the Vital Statistics for the whole City during 1938 and previous years :—

YEAR.	Registrar-General Estimate of Population to Middle of each Year	BIRTHS			TOTAL DEATHS REGISTERED IN THE DISTRICT		TRANSFERABLE DEATHS		NETT DEATHS BELONGING TO THE DISTRICT			
		Uncorrected Number	Nett		Number	Rate	of Non-residents registered in the District	of Residents not registered in the District	Under 1 Year of age		AT ALL AGES	
			Number	Rate					Number	Rate per 1,000 Nett Births	Number	Rate
1	2	3	4	5	6	7	8	9	10	11 .	12	13
1929	56,380	1037	1011	18.4	852	15.1	116	21	73	69.4	757	13.4
1930	56,380	1022	1010	18.1	803	14.2	127	32	68	65.5	708	12.5
1931	57,510	1012	979	17.6	805	13.9	144	22	66	65.2	683	11.8
1932	57,920	1029	961	17.8	878	15.1	145	30	84	81.6	763	13.1
1933	58,560	900	833	15.3	943	16.1	177	32	65	72.2	798	13.6
1934	58,500	903	850	15.4	840	14.3	157	20	55	60.9	703	12.0
1935	58,800	917	845	14.3	823	13.9	162	32	62	67.6	693	11.7
1936	59,030	927	840	14.2	931	15.7	190	17	72	77.6	758	12.8
1937	59,510	1038	1003	16.8	911	15.3	162	23	51	49.1	772	12.9
1938	60,220	1122	945	15.7	845	14.0	177	21	52	46.3	689	11.4

Birth-rate, Death-rate, and Infantile Mortality since 1901.

Year	No. of Births	Birth- rate	No. of Deaths	Gross Death- rate	Infantile Mor- tality	Average Five Years.		
						Birth- rate	Death- rate	Infantile Mortality
1901	1246	27.3	810	17.8	129	26.7	17.9	131.0
1902	1245	27.0	856	18.5	117			
1903	1322	28.4	813	17.4	118			
1904	1278	26.7	933	19.7	152			
1905	1168	24.3	783	16.3	139			
1906	1227	25.3	811	16.7	132	23.6	15.1	127.5
1907	1178	23.8	848	17.1	143			
1908	1223	24.4	713	14.2	129			
1909	1149	22.6	735	14.5	123.6			
1910	1145	22.2	683	13.2	110.0			
1911	1109	23.8	776	16.7	145.0	23.2	17.1	128.2
1912	1142	24.6	813	17.5	102.4			
1913	1164	22.1	821	15.6	127.1			
1914	1209	23.0	848	16.1	122.4			
1915	1192	22.6	1027	19.5	144.3			
1916	1103	20.3	850	17.0	101.5	19.9	15.5	104.5
1917	1117	18.8	826	15.5	106.5			
1918	1033	17.1	921	17.1	126.8			
1919	1066	18.5	778	14.1	107.9			
1920	1425	24.7	785	13.7	80			
1921	1310	24.6	818	15.3	105.3	21.8	15.3	88.5
1922	1267	23.6	864	16.1	81.2			
1923	1181	21.8	797	14.7	82.9			
1924	1116	20.3	849	15.4	95.0			
1925	1045	18.8	848	15.1	78.4			
1926	1159	20.5	821	14.6	81.9	18.9	14.5	71.6
1927	1037	18.3	802	14.1	68.4			
1928	1109	19.6	830	14.7	72.1			
1929	1037	18.4	852	15.1	69.4			
1930	1022	18.1	803	14.2	65.5			
1931	1012	17.6	805	13.9	65.2	16.3	14.6	69.5
1932	1029	17.8	878	15.1	81.6			
1933	900	15.3	943	16.1	72.2			
1934	903	15.4	840	14.3	60.9			
1935	917	15.6	823	13.9	67.6			
1936	927	15.7	931	15.7	77.6	16.5	14.6	60.3
1937	1038	17.4	911	15.3	49.1			
1938	1122	18.6	845	14.0	46.3			

The following figures relate to the deaths of persons not normally resident in the district which occurred within the City:—

Cumberland Infirmary	..	..	..	..	112
Private Nursing Homes	..	..	..	..	29
City General Hospital	..	..	..	..	22
Fusehill Institution	..	..	..	..	1
Strathclyde House	..	..	..	..	5
Private Houses	..	..	..	..	3
Infectious Diseases Hospital	..	..	..	..	2
City Maternity Hospital	..	..	..	..	1
Citadel Station	..	..	..	..	1
Crown & Mitre Hotel	...	..	..	..	1

Inquests.

During the year the City Coroner held 46 inquests. Of this number 25 related to deaths of persons who resided within the City, and 21 to persons who resided in other districts but who died within the City. 4 related to children under five years of age.

Uncertified Deaths.

55 deaths were registered of persons belonging to the City in which no certificate was given by a medical man, and in which no inquest was held.

During 1937, 50 such deaths were registered.

Mortuary.

26 bodies were removed to the Public Mortuary, a post-mortem examination being made in each instance.

Cancer.

The number of deaths registered as due to cancer was 83, as against 82 in 1937, the rate of mortality from this disease being 1.3 per 1,000 of the population.

Site of Disease	AGE GROUPS.													
	25—35		35—45		45—55		55—65		65—75		Over 75		Totals	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Buccal Cavity	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pharynx	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Oesophagus	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Stomach and Liver ..	—	—	—	1	2	—	5	4	3	3	1	5	11	13
Peritoneum, Intestines and Rectum ..	—	—	1	1	—	—	4	3	5	5	2	4	12	13
Female Genital Organs ..	—	1	—	2	—	—	—	2	—	3	—	1	—	9
Breast ..	—	—	—	1	—	—	—	1	—	3	—	2	—	7
Other Organs	1	—	—	—	2	2	2	2	4	1	3	1	12	6
Totals ..	1	1	1	5	4	2	11	12	12	15	6	13	35	48

DEATHS FROM CANCER, 1929-38.

1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.	1938.
80	78	69	79	86	68	79	83	82	83

GENERAL PROVISION OF HEALTH SERVICES.

Nursing in the Home.

The Corporation contributes £50 per annum to the funds of the Carlisle District Nursing Association. In addition, the nurses of the Association undertake the nursing of cases referred by this Department, and the Corporation pay an inclusive fee of £50 per annum in respect of these services. During the year 13 cases, comprising Bronchitis, Pneumonia, Measles, Erysipelas and Ophthalmia Neonatorum were referred to the Association.

Midwives.

In addition to the Midwives employed in the City Maternity Home and the City General Hospital, the Corporation employ, under the provisions of the Midwives Act, 1936, six Domiciliary Midwives, three directly appointed and three by arrangement with the Carlisle District Nursing Association. The Superintendent of the Association acts as Non-Medical Supervisor of the Domiciliary Midwives. The Maternity and Child Welfare Medical Officer is the Medical Supervisor of all midwives, of whom there were 21 in practice in the City at the end of the year.

Poor Law Medical Out-Relief.

The administration of the Medical Out-Relief is controlled by the Public Assistance Committee, and Dr. R. Craven is temporary District Medical Officer.

Ambulance Facilities.

These remain as outlined in the Annual Report for 1930.

Carlisle Council of Social Service.

The Corporation pays to the Carlisle Council of Social Service an annual grant of £60 to the General Fund, and an additional annual grant of £40 to the Orthopædic Clinic Fund,

Hospitals.

Hospital services used by the inhabitants of the area :—

Corporation Maternity Home	.. ..	13 beds & cots
Corporation Infectious Diseases Hospital	..	40 beds & 8 cots
Corporation Smallpox Hospital	.. .. .	14 beds
Fusehill Infirm Wards	.. .. .	42 beds
City General Hospital	.. .. .	95 beds
Blencathra Sanatorium, Threlkeld, Cumberland	..	76 beds
(Reservation by Corporation for City patients, 20 beds)		
Cumberland, Westmorland, and Carlisle Joint Committee for the Mentally Defective, Dovenby Hall, Cockermouth	.. .. .	300 beds
Cumberland Infirmary, Carlisle	.. .. .	151 beds
Border Counties Home for Incurables, Strathclyde House, Carlisle	.. .. .	38 beds
St. Joseph's Home, Carlisle (aged poor)	.. ..	96 beds
Cumberland & Westmorland Convalescent Institu- tion, Silloth	.. .. .	94 beds

City General Hospital.

Reconstruction work in the Hospital and the extension to the Nurses' Home have been going on during the latter half of the year, and are still in progress. The available accommodation has been reduced to one-half to two-thirds of the normal, and working has been difficult owing to disturbance and shortage of staff. At the date of this report the work is almost completed.

Carlisle Dispensary.

The Carlisle Dispensary provides medical benefits to such persons as are too poor to obtain medical relief elsewhere. Persons in receipt of public assistance are not entitled to the benefits of the charity. During 1938 there were 3,789 Out-patients and 1,898 Home-patients. The Corporation contributes £50 per annum to the funds.

North Cumberland and Carlisle City Association for Preventive Work.

Coledale Hall, the Headquarters of this Association, is the property of the Corporation, and is enjoyed by the Association free of rent and rates.

Carlisle Babies' Welcome and School for Mothers.

The amount of the Corporation's annual contribution to the Carlisle Babies' Welcome and School for Mothers during the current fixed grant period is £118 8s. 2d., and the premises in Abbey Street, which belong to the Corporation, are occupied by the Association free.

The services of the Maternity and Child Welfare Medical Officer are available, and she attends the Clinics on two sessions per week.

Institutional Provision for the Care of Mental Defectives.

Institutional treatment of Mental Defectives is undertaken at Dovenby Hall Colony, which is controlled by the Cumberland, Westmorland and Carlisle Joint Committee. Three new homes have been erected and equipped, and are now in operation. In addition, a new Recreation Hall, a new Laundry, and various ancillary services have been added. With the new extensions there is now accommodation for 120 male patients and 180 female patients. The accommodation for female patients is sufficient for the next few years, but increased accommodation for male patients is becoming a matter of great urgency, and it has been decided in principle to add one further Home for male patients.

Cancer

During the year 6 cases were referred for Deep X-Ray Therapy treatment and 3 were sent to the Christie Hospital and Holt Radium Institute, Liverpool, 1 to the Newcastle Royal Victoria Infirmary and 1 to the Newcastle General Hospital.

List of existing Clinics and Infant Welfare Centres in the City.

<i>Nature of Clinic.</i>	<i>Address.</i>	<i>Provided by</i>
MATERNITY AND CHILD WELFARE—		
Infant Clinic, Thursdays, 2 p.m.	.. Maternity Hospital, 4 George Street	.. Carlisle Corporation
Ante-natal Clinic, Tuesdays and Fridays, 2 p.m.	.. Do.	.. Do.
Post-natal Clinic, Tuesdays, 2 p.m.	Do.	.. Do.
Diphtheria Immunisation Clinic— As Arranged	Do.	.. Do.
INFANT WELFARE CENTRE—		
Mondays, 2 p.m. .. ..	.. 11 Abbey Street, Carlisle	.. The Carlisle Mothers' and Babies' Wel- come Society
Wednesdays, 2 p.m.	Do.	.. Do.
SCHOOL CLINIC—		
Minor Ailments, daily, 9 a.m.	.. School Clinic, 2 George Street	.. Carlisle Corporation
Dental, daily, 9 a.m.	Do.	.. Do.
Ophthalmic, Wednesdays, 9-15 a.m.	.. Do.	.. Do.
X-ray, as required	Do.	.. Do.
ORTHOPÆDIC CLINIC—		
Daily	Do.	.. Carlisle Council of Social Ser- vice
TUBERCULOSIS—		
Adult Clinic, Tuesdays, 2 p.m.	.. Tuberculosis Dispensary, 1 George Street	.. Carlisle Corporation
Children's Clinic, Wednesdays, 2 p.m.	.. Do.	.. Do.
Adult Clinic, Wednesdays, 7 p.m.	.. Do.	.. Do.
VENEREAL DISEASES—		
Female and Children's Clinics, Mondays, 2-30 p.m.; and Thursdays, 5-30 p.m.	.. Cumberland Infirmary	.. Jointly by Carlisle Corporation & Cumberland County Council
Male Clinics, Wednesdays, 2-30 p.m. and 6 p.m. and Thursdays, 6 p.m.	.. Do.	.. Do.

Prevention of Blindness.

No action has been taken under Section 176 of the Public Health Act, 1936.

RAINFALL.

Observations taken at the Carlisle Cemetery.

MONTHS.	1938.		Average for 10 years 1928-1937.
	Rainfall.	Number of days on which Rain fell.	
	in.		in.
January	2.28	22	2.9
February	0.94	13	1.9
March	1.44	14	1.7
April	0.42	5	1.7
May	2.93	16	1.7
June	3.18	18	2.9
July	4.31	14	3.7
August	2.90	16	3.4
September	2.17	13	2.6
October	6.67	23	3.8
November	5.91	25	2.7
December	2.69	20	2.6
Totals	35.84	199	31.6
Total number of days on which Rain fell	..	..	196

SANITARY CIRCUMSTANCES.

Water.

The water from the catchment areas remains very free from surface impurities. A Multilec Recorder electrically operated was temporarily installed for the purpose of recording constantly Ph. values as a check upon any tendency towards plumbo-solvency. There has been no recurrence of algal growths in the Castle Carrock Reservoir during the year. The whole of the open sand filters have been cleaned out, and the beds made up with new sand. The clear water tank has been thoroughly cleaned out, and all ironwork, etc., repainted.

Water Supply.

Total annual distribution of Water from Cumwhinton covered reservoir during the years 1929-38.

Year.	Number of Gallons.	No. of Gallons per head, per day.
1929 ..	889,620,000	.. 38.42
1930 ..	803,940,000	.. 34.69
1931 ..	819,130,000	.. 35.22
1932 ..	938,400,000	.. 40.47
1933 ..	918,240,000	.. 39.62
1934 ..	838,040,000	.. 36.05
1935 ..	915,860,000	.. 39.44
1936 ..	1,040,000,000	.. 44.76
1937 ..	980,680,000	.. 42.31
1938 ..	1038,500,000	.. 44.61

Bacteriological results of Samples of Water taken from a Domestic Tap.

QUANTITATIVE ANALYSIS.

Date when sample was taken.	No. of Colonies in					
	0.1 c.c.		1 c.c.		10 c.c.	
	At 22° c.	At 37° c.	At 22° c.	At 37° c.	At 22° c.	At 37° c.
5th Jan. ..	—	—	3	—	38	4
7th April ..	—	—	3	—	22	4
4th May ..	—	—	3	—	25	3
3rd June ..	2	—	16	4	218	51
7th July ..	—	—	5	2	63	15
11th July ..	—	1	4	10	34	128
6th August ..	2	—	21	2	164	15
7th September	—	—	6	1	83	17
3rd Oct. (with- out prelimin- ary running)	—	—	7	2	92	14
3rd Oct. (after preliminary running)	—	—	1	—	10	3
2nd November	—	—	4	—	43	5
3rd December	—	—	2	—	18	4

B. Coli absent in all but one sample and in this sample the probable number of Coli-aerogene organisms present per 100 c.c. was 5 and were faecal in origin, *i.e.*:—Methyl Red—positive, Voges Proskaver—negative.

Results of Chemical Analysis of Samples of Water taken from a Domestic Tap.

RESULTS SHOWN IN PARTS PER 100,000.	5th APRIL	2nd JUNE	5th AUG.	5th OCT.
Chlorine as Chlorides ..	1.1400	1.1400	1.1400	1.1930
Nitrogen as Nitrates ..	.0288	.0187	.0204	.0174
Ammonia .. ..	.0050	.0043	.0022	.0029
Albuminoid Ammonia ..	.0058	.0108	.0078	.0066
Oxygen absorption ..	.2058	.1568	.2082	.2400
Injurious Metals (Lead and Copper)	none	none	none	none
Total Solid Matter dried at 100° C.	10	12	10	9
Temporary Hardness ..	0.6°	4.0°	2.4°	1.6°
Permanent Hardness ..	6.4°	3.0°	5.4°	6.0°
P.H. Value	7.3	7.4	7.4	
Appearance in two-foot tube	Not quite clear	Not quite clear	Not clear	Not quite clear
Odour when heated to 50° C.	none	none	none	none
Microscopical Examina- tion	Minute deposit from $\frac{1}{2}$ gallon consisting of earthy matter vegetable debris, some fungus growths and micro- organisms	Very small deposit from $\frac{1}{2}$ gallon consisting of earthy matter vegetable debris, micro- organisms and some starch granules	Minute deposit from $\frac{1}{2}$ gallon consisting of earthy matter vegetable debris, fungus growths, micro- organisms and cotton fibres	Minute deposit from $\frac{1}{2}$ gallon consisting of particles of sand, some vegetable debris, fungus growths and a few micro- organisms

Rivers and Streams.

None of the water from rivers or streams in the area of the Authority is used for drinking purposes, and no necessity arose for any action to be taken in respect of pollution.

Sewerage.

The work of providing new relief sewers for the Currock and Denton Holme districts has been steadily proceeding throughout the year. The work is being carried on under the supervision of the City Engineer by direct labour, and the scheme is well advanced. When completed it will be of benefit to the areas mentioned, and should also relieve congestion in the Botchergate district, where there is a certain amount of surcharge in the main sewers.

Schools.

During the year a survey was made of the Elementary Schools, and a note taken as to the situation, type, sufficiency, etc., of the sanitary accommodation. A tabulated report has been prepared, and the following extract from the report indicates to what extent the existing accommodation is insanitary or insufficient when compared with the standard set up by the Board of Education in their Building Regulations, 1930 :—

Report upon Sanitation in Schools.

School.	Total scholars	Extent to which accommodation falls below the Board of Education Standard.
Ashley Street ..	848 ..	No automatic flush to urinal. Deficiency of 16 feet urinal stall.
Brook Street ..	913 ..	Deficiency of 6 feet urinal stall. " " 7 W.Cs. for girls.
Caldewgate ..	681 ..	No Automatic flush to urinals. Deficiency of 19 feet urinal stall. " " 2 W.Cs. for girls.
Denton Holme ..	279 ..	Deficiency of 2 W.Cs. for girls.
Creighton ..	305 ..	Deficiency of 1 W.C. for boys. " " 13 feet urinal stall.
Margaret Sewell ..	233 ..	Deficiency of 7 W.Cs. for girls.
Lowther Street ..	208 ..	No automatic flush to urinal.
Norman Street ..	414 ..	No automatic flush to urinal. Deficiency of 3 feet urinal stall. " " 1 W.C. for boys. " " 4 W.Cs. for girls.
New town ..	400 ..	Deficiency of 9 feet urinal stall. " " 3 W.Cs. for girls.
Robert Ferguson ..	476 ..	No automatic flush to urinal. Deficiency of 2 W.Cs. for infants.
Stanwix ..	400 ..	Deficiency of 1 foot urinal stall. " " 3 W.Cs. for girls. " " 4 W.Cs. for infants.
Upperby ..	403 ..	Deficiency of 11 feet urinal stall. " " 1 W.C. for girls.
Bishop Goodwin ..	1034 ..	Deficiency of 1 foot urinal stall. " " 10 W.Cs. for girls. " " 1 W.C. for boys (infants) " " 6 W.Cs. for girls (infants)..
Christ Church ..	85 ..	The 14 trough closets for both sexes are insanitary.
St. Bedes ..	324 ..	No automatic flush to urinal. Deficiency of 7 feet urinal stall. " " 5 W.Cs. for girls.
St. Cuthbert's ..	247 ..	No automatic flush to urinal.
St. Patrick's ..	237 ..	No automatic flush to urinal. Deficiency of 2 W.Cs. for girls. 6 W.Cs. flushed from an automatic flushing tank.
St. Stephen's ..	81 ..	4 insanitary trough closets for boys. Deficiency of 1 W.C. for girls. No automatic flush to open urinal. No flush to urinal stalls.
H. K. Campbell ..	92 ..	
St. John's ..	135 ..	7 insanitary trough closets for boys.
St. Margaret Mary's ..	157 ..	Deficiency of 1 W.C. for girls.

No regard is had, in this table, to 495 scholars who were, at 31st December, temporarily accommodated in premises outside the schools.

Public Baths.

The Public Baths owned by the Corporation are a valuable and up-to-date suite, and comprise the following :—

Two Plunge Baths.

Ladies' and Gentlemen's Slipper Baths.

Turkish Baths.

Foam Baths.

Filtration Plant, and

Laundry.

The plunge baths are 25 yards long by 10 yards wide, and 21 yards long by 10 yards respectively, whilst the depth of water in them ranges from 3 ft. 3in. to 5ft. 6in. in the one, and from 2ft. 3in. to 5ft. 6in. in the other. The water in the plunge baths is treated continuously so that the entire contents of the pools are completely dealt with in four hours.

The purification plant installed at the Baths, provides for :—

1. Continuous circulation of the water.
2. The retention of coarse, floating matter, hair, etc., which obtain access to the system.
3. Treatment with the appropriate re-agents to coagulate the colloidal impurities and remove the colour.
4. Filtration through mechanical pressure filters to remove colloidal impurities and suspended matter.
5. Aeration of the water to maintain it in a clear and sparkling condition.
6. Sterilization to destroy the pathogenic bacteria, and so render the water safe.
7. Re-heating the water before its return to the pools.

The filtration plant consists of a battery of four pressure filters, capable of dealing with about forty thousand gallons per hour, and the sterilization is effected by means of the application of liquid chlorine in the requisite amount.

The resultant water as it re-enters the Baths is comparable in quality with that of drinking water, provided for a town supply.

The Slipper, Turkish and Foam Baths are luxuriously appointed, and adequate for all of their several purposes, which include amongst other things the treatment of many ailments, such as rheumatism, arthritis and kindred complaints.

Eradication of Bed Bugs.

During the year 22 Council houses were found to be vermin infested, and in all cases the wallpaper and woodwork (picture rails, skirtings, etc.) were removed; the woodwork, floors and plaster cracks treated by a blow lamp, and the interior of the houses sprayed with paraffin. This work was undertaken by employees of the Council. The period from report of vermin until the restoration of the woodwork, etc., was from four to six weeks. In addition 12 Council houses were disinfected by Hydrogen Cyanide by Mr. H. W. Seymour, of London, or by a Contractor.

In many instances Insecticides (Zaldecide, Exterpest and Clymax) and disinfectant soap were provided free of charge and the inhabitants of the infected houses were also recommended to wash the walls with Naphtha.

The furniture and effects of 450 tenants entering into Corporation houses were disinfected at the Hydrogen Cyanide Disinfestation Plant, which was established, in conjunction with the steam disinfector, at the Infectious Diseases Hospital, in May, 1937.

In order that the belongings of all prospective Corporation tenants be treated by Hydrogen Cyanide another van and fittings, and additions to the disinfestation plant were purchased during the year. A motor tractor was also purchased to expedite the transport of the van to and from the disinfestation plant.

HOUSING.

Each year sees continued activity in connection with the Council's policy for the treatment of insanitary properties. It is evident from the figures shown in paragraph 3 that the *totally* unsatisfactory type of property, for which there is no alternative to demolition, is fast disappearing from the City and that the majority of future representations will be satisfied by reconstruction of the houses rather than by demolition or closure.

Of the 417 separate dwellings represented during the year, only 30 Demolition Orders were made, whilst 215 undertakings for re-construction were accepted.

Continuing the policy found to operate most satisfactorily in the past, activities were concentrated upon those dwelling houses best dealt with under Sections 11 and 12 of the Act.

There appears to be no easing up in the demand for Corporation houses, and during the year some 700 applicants, purporting to have special claims for consideration, were interviewed and their various claims investigated.

1—*Inspection of Dwelling Houses.*

(1) (a) Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts)	943
(b) Number of Inspections for the purpose	2279
(2) (a) Number of dwelling houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 . .	417
(b) Number of Inspections for the purpose	798
(3) Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	417
(4) Number of dwelling houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation . .	18

2—*Remedy of Defects without Service of formal Notices.*

Number of defective dwelling houses rendered fit in consequence of informal action by the Local Authority or their officers	—
---	---

3—*Action under Statutory Powers.*

(a)—Proceedings under Sections 9, 10, and 16 of the Housing Act, 1936—

- | | |
|---|------|
| (1) Number of dwelling houses in respect of which notices were served requiring repairs | none |
| (2) Number of Dwelling houses which were rendered fit after service of formal notices | |
| (a) By Owners | none |
| (b) By Local Authority in default of Owners.. .. . | none |

(b) Proceedings under Public Health Acts—

- | | |
|--|-----|
| (1) Number of dwelling houses in respect of which notices were served requiring defects to be remedied | 268 |
| (2) Number of dwelling houses in which defects were remedied after service of formal notices— | |
| (a) By Owners | 233 |
| (b) By Local Authority in default of Owners.. .. . | — |

(c)—Proceedings under Sections 11 and 13 of the Housing Act, 1936—

- | | |
|---|----|
| (1) Number of dwelling houses in respect of which Demolition Orders were made | 30 |
| (2) Number of dwelling houses demolished in pursuance of Demolition Orders | 74 |

(d) Proceedings under Section 12 of the Housing Act, 1936—

- | | |
|---|----|
| (1) Number of separate tenements or underground rooms in respect of which Closing Orders were made | 19 |
| (2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit | — |
-

Re-housing.

The total number of separate dwellings represented to the Local Authority under the provisions of the Housing Act, 1936, was 417.

Table showing disposal of families from condemned property :—

1. Number of families removed from condemned property directly to Corporation houses ..	402
2. Number of families removed from condemned property to other houses (conceding their claim to a Corporation house to some other person)	20
3. Number of families removed from other property to Corporation houses	13
4. Total Corporation houses (new) occupied by this type of tenant during the year ..	235
5. Total occupied at December, 1938	982

Undertakings were accepted by the Local Authority in respect of 362 unfit houses, 215 for reconstruction into satisfactory dwelling houses, and 147 under Sec. II (2) that the dwellings should not be used for human habitation.

HOUSING PROGRAMME.

POSITION AT 31st DECEMBER, 1938, SHOWING NUMBER OF HOUSES AND HOW DEALT WITH.

TOTAL.

2287

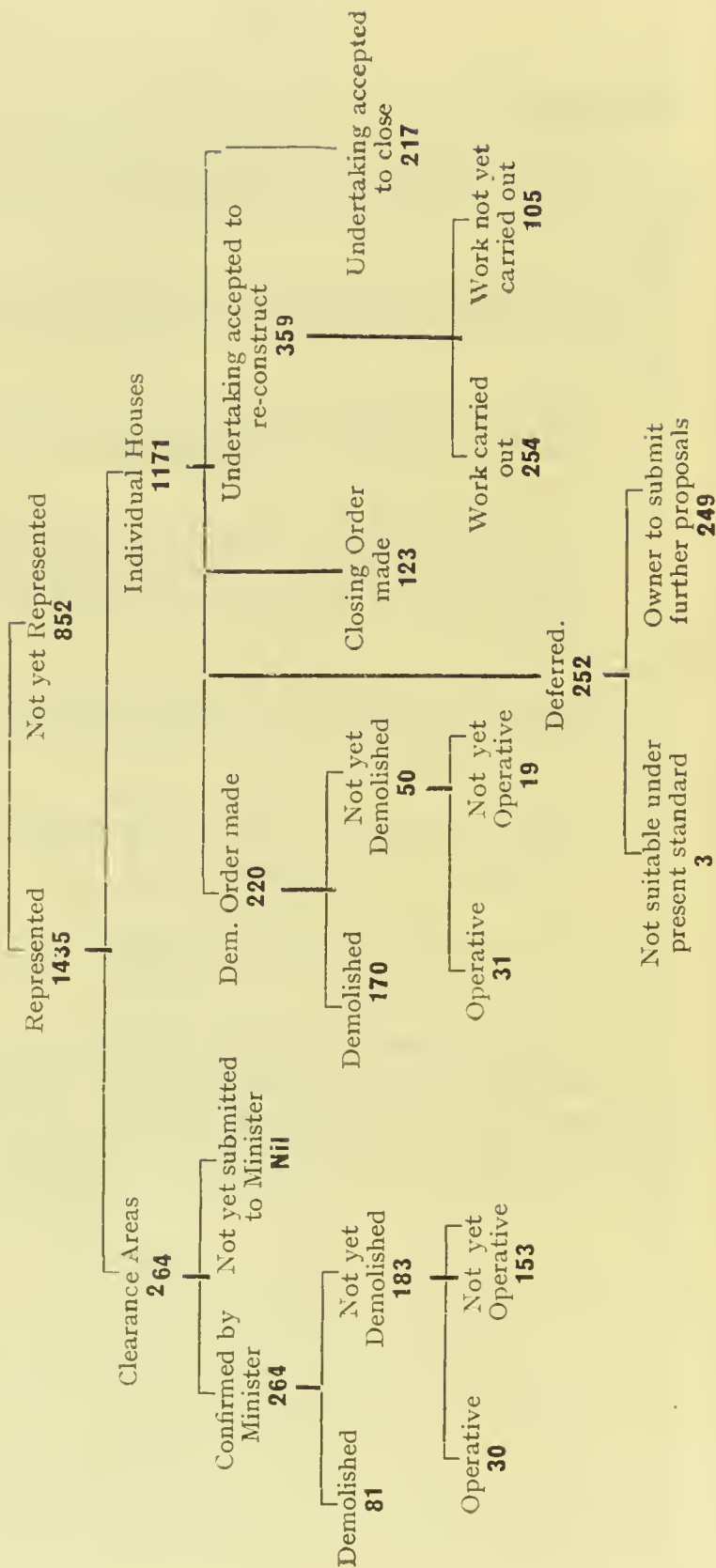


Table showing number of Houses dealt with by way of Clearance Areas.

<i>Areas.</i>	<i>Date of Representation.</i>	<i>No. of Houses. Pink.</i>	<i>Grey.</i>	<i>Population.</i>	<i>Date of Inquiry.</i>	<i>Date of Confirmation.</i>	<i>No. of Houses Demolished.</i>
Carlisle No. 1 (Shaddongate) Clearance Area	14/2/33	..	19	..	—	..	19
„ No. 2 (Halfway Houses)	.. 5/12/33	..	13	..	5/7/34	.. 16/11/34	13
„ No. 3 (Backhouses Court)	.. 5/12/33	..	9	..	5/7/34	.. 16/11/34	9
„ No. 4 (Green Row Ct.)	.. 5/12/33	..	7	..	5/7/34	.. 16/11/34	7
„ No. 5 (Storey's Court)	.. 5/12/33	..	5	..	5/7/34	.. 16/11/34	5
„ No. 6 (Knowe Terrace)	.. 5/12/33	..	5	..	5/7/34	.. 16/11/34	5
„ No. 7 (St. Martin's Lane)	.. 5/12/33	..	8	..	5/7/34	.. 16/11/34	8
„ No. 8 (Burns Street)	.. 5/12/33	..	5	..	5/7/34	.. 16/11/34	5
„ No. 9 (Hope's Court No. 1)	.. 5/12/33	..	7	..	5/7/34	.. 16/11/34	7
„ No. 10 (Chapel Street)	.. 5/12/33	..	18	..	5/7/34	.. 16/11/34	18
„ No. 11 (Hope's Court No. 2)	.. 27/3/36	..	14	..	—	.. 29/9/36	—
„ No. 12 (Robert Street)	.. 27/3/36	..	8	..	—	.. 29/9/36	—
„ No. 14 (Railway Place)	.. 23/12/36	..	8	..	19/7/37	.. 23/11/37	—
„ No. 15 (Mullen's Court)	.. 23/12/36	..	4	..	19/7/37	.. 23/11/37	4
„ No. 16 (Rydal Street) C.P. Order	.. 23/12/36	..	153	.. 3	19/7/37	.. 23/11/37	—

**Table showing number of Houses erected in Carlisle
since 1920**

Year.	By Private Enterprise.	By Carlisle Corporation.	Total.
1920-1928 ..	431 ..	1924 ..	2355
1929 ..	49 ..	375 ..	424
1930 ..	84 ..	250 ..	334
1931 ..	— ..	360 ..	360
1932 ..	68 ..	262 ..	330
1933 ..	318 ..	60 ..	378
1934 ..	80 ..	74 ..	154
1935 ..	185 ..	182 ..	367
1936 ..	220 ..	290 ..	510
1937 ..	589 ..	440 ..	1029
1938 ..	230 ..	510 ..	740
Totals ..	<u>2254</u> ..	<u>4727</u> ..	<u>6981</u>

Number of New Houses erected during 1938

Size of House.	Built by Carlisle Corporation.	Built by Private Enterprise.
1 Bedroom	52 ..	—
2 " "	100 ..	—
3 " "	310 ..	—
4 " "	24 ..	—
5 " "	24 ..	—
Totals	<u>510</u> ..	<u>230</u>
Total number of New Houses erected—740		

Housing Act, 1936—Part IV.—Overcrowding.

(a) (1) Number of dwellings overcrowded at the end of the year :—

Privately owned houses	..	..	80	
Council houses	..	..	149	
			—	229

(2) Number of families dwelling therein :—

Privately owned houses	..	..	86	
Council houses	..	..	184	
			—	270

(3) Number of persons dwelling therein :—

Privately owned houses—

Over 10 years of age	..	382	
Aged 1—10 years	..	114	
Under 1 year of age	..	9	
		—	505

Council houses—

Over 10 years of age	..	1011	
Aged 1—10 years	..	287	
Under 1 year of age	..	13	
		—	1311
			— 1816

(b) Number of new cases of overcrowding reported during the year—

Privately owned houses	..	..	31	
Council houses	..	..	37	
			—	68

(c) (1) Number of cases of overcrowding relieved during the year—

Privately owned houses	..	196	
Council houses	..	127	
		—	323

(2) Number of persons concerned in such cases—

Privately owned houses—

Over 10 years of age	..	810	
Aged 1—10 years	..	254	
Under 1 year of age	..	8	
		—	1072

Council houses—

Over 10 years of age	..	794	
Aged 1—10 years	..	196	
Under 1 year of age	..	15	
		—	1005
			— 2077

*

- (d) Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding :—

None.

- (e) Any other particulars with respect to overcrowding conditions upon which the Medical Officer of Health may consider it desirable to report :—

During the year 39 cases of illegal overcrowding have been discovered, 33 in privately owned houses, and 6 in Council houses. In the privately owned houses 10 cases occurred in sub-let rooms. No case has been found in which a landlord has wilfully permitted overcrowding. In all cases written informal notice has been given to the landlord, tenant, and, where applicable, the sub-tenant, to abate the overcrowding. Most cases have been abated after allowing a reasonable time, and it has not yet been found necessary to take legal proceedings to secure abatement.

Investigations into each case have revealed that the reason for much of the overcrowding is due to the great difficulty in securing Council houses, and also working-class type of houses at a reasonable rental. The demand has been aggravated by the large influx of building trade workers, who are engaged on Government schemes in the vicinity of Carlisle.

INSPECTION AND SUPERVISION OF FOOD.

Milk Supply.

A relatively small proportion of the milk supply is produced within the City. Only 7 producers, occupying 17 sheds, are on the register.

Under the provisions of the Milk (Special Designations) Order, 1936, 22 licences were issued during the year, viz., 4 to persons producing and bottling Tuberculin Tested Milk, 1 to a person producing and bottling Accredited Milk, 1 to the Co-operative Wholesale Society, Ltd., and 1 to the Nestle and Anglo Swiss Milk Products Co., Ltd., in respect of pasteurising plant, 1 to the Carlisle Co-operative Society to retail pasteurised milk, and 14 to retailers, 5 of which were in respect of Tuberculin Tested Milk, and 8 in respect of Accredited Milk. One licence in respect of Tuberculin Tested Milk permitted the retailers to bottle the milk on their premises.

The manufacture of dried milk is undertaken at one large milk receiving Depot in the City.

235 samples of milk were obtained and submitted for the statutory bacteriological tests, and the following are the results :—

117 Samples of Ordinary Milk.

Methylene Blue Test	..	..	..	..	117
Satisfactory	..	..	..	..	46
Unsatisfactory	..	..	..	..	71
Tests of presence of Coliform Bacilli in 1/100 m.l.					41
Satisfactory	..	..	..	..	8
Unsatisfactory	..	..	..	..	33
Inoculation for Tubercle	..	..	..	..	32
(Negative) Satisfactory	..	..	..	..	32
(Positive) Unsatisfactory	..	..	..	..	—

67 *Samples of T.T. Milk.*

Methylene Blue Test	..	..	..	..	67
Satisfactory	..	..	..	..	47
Unsatisfactory	..	..	..	..	20
Coliform Bacilli	..	..	..	..	26
Satisfactory	..	..	..	..	17
Unsatisfactory	..	..	..	..	9
Inoculation for Tubercle		..	..	..	9
Negative	..	..	..	..	9
Positive	..	..	..	..	—

43 *Samples of Accredited Milk,*

Methylene Blue Test	..	..	..	..	43
Satisfactory	..	..	..	..	29
Unsatisfactory	..	..	..	..	14
Coliform Bacilli	..	..	..	..	19
Satisfactory	..	..	..	..	11
Unsatisfactory	..	..	..	..	8
Inoculation for Tubercle		..	..	..	12
Negative	..	..	..	..	12
Positive	..	..	..	..	—

8 *Samples of Pasteurised Milk.*

Bacteria Count	..	..	..	..	8
Satisfactory	..	..	..	..	8
Unsatisfactory	..	..	..	..	—
Phosphatase Test	..	..	..	..	4
Satisfactory	..	..	..	..	4
Unsatisfactory	..	..	..	..	—

There has been no refusal nor revocation of registration of a retailer, nor of a licence for graded milk.

No sample of artificial cream, condensed milk or dried milk was submitted for examination.

Meat and Other Foods.

Four licences are operative in respect of two slaughterhouses on railway premises. They are issued exclusively for the killing of sheep, the carcasses of which are conveyed by rail to wholesale markets elsewhere. Another slaughterhouse is licensed in connection with the Bacon Factory. All these premises were kept in a satisfactory condition ; the latter receiving daily attention.

The public slaughterhouses, under the control of the Local Authority, were well maintained. Ante-mortem inspection was carried out at the public auctions by the Ministry's Inspector, and at the slaughterhouses by the Superintendent. Post-mortem is undertaken, in the first instance, by the Superintendent, resident on the premises, who retains all unsound, diseased or suspicious meat for further examination by the Medical Officer of Health or Sanitary Inspector.

Greener, captive bolt, and electrical apparatus are used for stunning cattle, sheep and pigs respectively at all slaughterhouses. Condemned meat and offal are, after treatment, collected by a firm outside the City and converted into commercial products.

There were, at the end of the year, 109 licensed slaughtermen in the City. Hawking of meat in the City is forbidden by bye-law.

Shop and market premises upon which foodstuffs were prepared or exposed for sale were under constant supervision, 232 visits were paid to meat preparation premises, and 117 to meat and food shops. Satisfactory standards were maintained. In addition to a small refrigerator plant now installed by many food retailers, there are, in the City, two such plants of large capacity.

There is no Meat Marketing Scheme in force in the City.

Chemical and Bacteriological Examinations.

Chemical examinations are carried out by Cyril J. H. Stock, Esq., B.Sc., F.I.C., etc., of Darlington.

• Bacteriological examinations, with the exception of specimens from the Venereal Diseases Clinic, are carried out at the Pathological Department of the Cumberland Infirmary, Carlisle. In addition to samples of milk, the following examinations were carried out, viz. :—

Throat, Nose and Ear Swabs for K.L.B...	..	255
Urine .. .. .	..	43
Cerebro-Spinal Fluid .. .. .	..	1
Blood for Widal .. .. .	..	3
Blood for Culture .. .. .	..	2
Blood for Urea .. .. .	..	3
Sputum .. .. .	..	10
Faeces .. .. .	..	3
Skin for Section .. .. .	..	1
Miscellaneous .. .. .	..	63

Propaganda.

• During the year the sound film of the National Association for the Prevention of Tuberculosis—"The Conquest of Tuberculosis," and the Ministry of Health's sound film—"Your Enemy the Rat," were exhibited at local cinemas.

Lectures and addresses have been given, and articles contributed to the local press by members of the Staff of the Department.

Table showing the Age Groups and Wards in which cases of Infectious Diseases were notified during 1938.

Number of Cases notified at various Ages.							Number of Cases notified in each Ward.										Total number of cases notified.	Number of cases in- correctly notified	Net number of cases notified	Number of cases removed to hospital
Under 1 year	1—5 years	5—15 years	15—25 years	25—45 years	45—65 years	65 and up- wards	Stanwix and Efferby	Rickergate	Aglionby	Greystone	St. Nicholas	Currock	Denton Holme	St. Cuthbert's	Caldegate	Newtown & Belle Vue				
Scarlet Fever ..	93	299	19	25	2	—	13	6	21	70	33	85	23	32	44	114	441	6	435	259
Diphtheria ..	5	15	7	—	1	—	2	—	1	3	—	8	3	2	—	9	28	6	22	24
Erysipelas ..	—	—	2	9	13	5	2	2	2	2	1	7	1	2	3	8	30	—	30	5
Malaria ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute Primary Pneumonia	6	2	9	8	9	4	2	2	2	1	1	9	2	2	3	8	32	—	32	2
Acute Influenzal Pneumonia ..	1	—	1	1	1	2	—	—	1	—	—	3	—	1	—	2	7	—	7	—
Encephalitis Lethargica ..	—	—	—	—	—	—	—	—	2	2	—	3	1	2	3	7	20	—	20	5
Ophthalmia Neonatorum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cerebro-spinal Meningitis ..	—	—	—	—	—	—	—	—	45	89	37	98	45	36	37	82	525	—	525	8
Measles ..	44	480	1	5	15	3	27	29	4	8	8	7	4	2	5	14	55	—	55	—
Pulmonary Tuberculosis	—	1	8	1	1	1	1	2	—	2	1	5	1	—	—	3	13	—	13	—
Other forms of Tuberculosis	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1	—	1	1
Enteric Fever ..	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery ..	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—
Puerperal Pyrexia ..	—	—	—	—	—	—	1	2	1	9	3	1	—	1	1	2	21	—	21	13
Poliomyelitis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

PREVALENCE OF, AND CONTROL OVER, INFECTIOUS DISEASES.

Infectious Diseases Generally.

1174 notifications of infectious diseases were received during the year, 68 of which related to various forms of tuberculosis, and 1106 to other infectious diseases.

16 deaths were certified as due to the seven principal zymotic diseases, equal to a zymotic death-rate of 0.2 per 1,000 of the population. In the previous year 10 deaths were certified as due to zymotic diseases.

Scarlet Fever.

441 cases of scarlet fever were notified, as compared with 136 in 1937 ; the type of the disease was mild.

58.7 per cent. of the cases notified were removed to the Infectious Diseases Hospital.

Two deaths of residents were registered as being due to scarlet fever.

No experimental work in connection with ascertainment of susceptibles nor in respect of immunisation was undertaken.

There were 4 return cases of scarlet fever.

Table showing notifications, cases isolated, and number of deaths from scarlet fever during the years 1934-1938.

Year	No. of cases notified	No. of cases isolated in Hospital	Average period in Hospital (days)	No. of return cases	No. of deaths	Deaths per 100 cases
1934	207	150	31.2	2	2	0.9
1935	185	110	29.6	5	1	0.5
1936	96	66	27.7	0	0	0.0
1937	136	95	29.0	0	1	0.7
1938	441	259	28.3	4	2	0.4

Diphtheria.

28 cases of diphtheria were notified, as against 29 in 1937.

In 6 instances the patient was subsequently found not to be suffering from diphtheria.

Three deaths occurred of residents of Carlisle.

The cases were of a mild type, presenting no unusual features.

24 cases were removed to the Infectious Diseases Hospital.

No return case of diphtheria occurred.

The scheme for immunisation against diphtheria is being continued, and the work is concentrated upon the pre-school child and the children attending the Infants' departments in the elementary schools. Schick test is carried out, except in the case of children under 5, and all children are re-tested six months after the last immunising injection. Outside the Local Authority's scheme considerable numbers have received immunising injections at the hands of the Pathologist at the Cumberland Infirmary, whose records in this connection have been made available to the Public Health Department.

Table showing notifications, cases isolated, and number of deaths from diphtheria during the years 1934-1938.

Year.	No. of cases notified	No. of cases isolated in Hospital	No. of deaths	Deaths per 100 cases
1934	78	76	9	11.5
1935	89	79	5	5.6
1936	52	42	—	0.0
1937	29	28	1	3.4
1938	28	24	2	7.1

Anti-Diphtheria Serum.

7 applications were made by medical practitioners for the free supply of anti-diphtheria serum, 96,000 units having been supplied.

Table showing case mortality of Scarlet Fever and Diphtheria isolated in Hospital compared with that of Home Cases.

Years	SCARLET FEVER				DIPHTHERIA.			
	Hospital Cases		Home Cases		Hospital Cases		Home Cases	
	No. of Cases Isolated	Death-rate per 100	No. of Cases Isolated	Death-rate per 100	No. of Cases Isolated	Death-rate per 100	No. of Cases Isolated	Death-rate per 100
1934	78	1.3	129	0.7	76	11.5	2	0.0
1935	110	0.0	75	1.2	79	6.4	11	0.0
1936	66	0.0	30	0.0	42	4.7	10	0.0
1937	95	1.0	41	0.0	28	3.5	1	0.0
1938	259	0.7	182	0.0	24	8.3	4	0.0

One death from Diphtheria at home not notified.

Enteric Fever, Para-Typhoid Fever, Typhus or Continued Fever.

One case of Enteric Fever was notified, and the patient removed to the Infectious Diseases Hospital.

Table showing the average number of cases notified as Enteric Fever for 5-year periods, 1910-1934, and for the years 1935-1938.

Years	Average for periods of 5 years	Year	Number of cases notified
1910-1914	3.8	1935	3
1915-1919	1.4	1936	3
1920-1924	2.2	1937	1
1925-1929	6.0	1938	1
1930-1934	1.6		

Smallpox.

No case was notified, nor was any intimation received of contact elsewhere with the disease.

No vaccinations were undertaken during the year under the Public Health (Smallpox Prevention) Regulations, 1917.

Vaccination Return.

Number of births returned as registered from 1st January to 31st December, 1937	1050
Successfully Vaccinated	685
Insusceptible of Vaccination	—
Had Smallpox	—
Number in respect of whom Statutory Declara- tions of Conscientious Objection have been received	228
Died Unvaccinated.. .. .	41
Postponement by Medical Certificate	5
Removal to other Districts	26
Removal to places unknown or which cannot be reached, and Cases not having been found..	35
Number of births remaining on 31st January, 1939, neither duly entered nor temporarily accounted for	30
Total number of Certificates and copies of Certificates of Successful Primary Vaccination of Children under 14 received during 1938 ..	617
Number of Statutory Declarations of Con- scientious Objection actually received during 1938	208

Malaria, Dysentery, and Tetanus.

One notification of Dysentery was received.

Pneumonia.

39 notifications of pneumonia were received during the year. In 7 instances the disease was stated to be of the acute influenzal type, and in 32 instances of the acute primary type.

In two instances the patient was removed to Hospital.

There was one death from primary pneumonia.

Influenza.

10 deaths of residents were registered as due to influenza, as compared with 26 in 1937.

The age distribution of the deaths occurring among the 10 persons was as follows :—

0 to 1	1 to 2	2 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 and up- wards	Total
—	—	—	—	—	—	1	1	1	3	3	1	10

Encephalitis Lethargica.

No notification of encephalitis lethargica was received.

Cerebro-Spinal Meningitis.

No case of cerebro-spinal meningitis was notified.

Cases admitted from the Border Rural District comprised 30 Scarlet Fever, 2 Diphtheria and 1 Pneumonia.

Cases admitted from the Cumberland Infirmary resident in areas outside the City or Border Rural District comprised 2 Scarlet Fever, 2 Measles, 1 Erysipelas and 1 other condition.

Nine cases of Diphtheria, and 5 of Scarlet Fever were admitted from the Wigton area and 1 case of Measles from Cockermouth.

Fifteen Cases of Puerperal Pyrexia, 1 of Erysipelas and 9 Other conditions were admitted from the area of the Cumberland County Council

One case of Scarlet Fever was admitted from a Nursing Home in the City,

Two cases of Puerperal Pyrexia and 1 Other condition were admitted from the City General Hospital, but the patients were residents in the County of Cumberland.

Seventy-seven cases of Scarlet Fever were treated with serum ; Tonsillectomy was performed in 2 cases of Diphtheria and 2 cases of Scarlet Fever had mastoid operation performed.

TUBERCULOSIS.

At the Tuberculosis Dispensary sessions were held by the Clinical Tuberculosis Officer at the following times:—

Tuesdays : 2--4 p.m. (adults).

Wednesdays : 2—4 p.m. (children).

Evening sessions were also held on first and second Wednesdays of each month at 7 p.m. for adults who are in employment and unable to attend on Tuesday afternoons.

Notifications.

The number of primary notifications of tuberculosis received during the year was 68; 55 were in respect of pulmonary tuberculosis, and 13 of the non-pulmonary type of the disease. 15 additional cases, viz.:—9 pulmonary and 6 non-pulmonary came to the notice of the Medical Officer of Health otherwise than by formal notification, making a total of 83 new cases. The sex incidence of all new cases is:—

			Males.		Females.
Pulmonary	..	..	34	..	30
Non-Pulmonary	..	..	13	..	6
			<hr/>		<hr/>
	Total	..	47	..	36
			<hr/>		<hr/>

Formal notifications of tuberculosis during the past five years :—

Year.	Pulmonary.	Non-Pulmonary.
1934	51	22
1935	32	15
1936	49	18
1937	37	40
1938	55	13

The number of notifications received during the year was about the same as the average of the previous four years. There was a marked increase in the number of pulmonary cases notified ; while the notifications of the non-pulmonary type showed a decided decrease, being one-third of the figure for the previous year.

Formal Notifications.

Summary of notifications during the period from the 1st January, 1938, to 31st December, 1938.

Age periods	Number of Primary Notifications of new cases of Tuberculosis.											Total (all ages)	Total Notifications
	0-1	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65 & upwards		
Pulmonary—													
Males ..	—	—	—	3	2	1	4	7	5	4	2	28	29
Females ..	—	—	1	1	4	4	8	2	4	2	1	27	29
Non-pulmonary													
Males ..	—	1	5	2	—	—	—	1	1	—	1	11	11
Females ..	—	—	1	—	—	1	—	—	—	—	—	2	3
Totals ..	—	1	7	6	6	6	12	10	10	6	4	68	72

Supplemental Return.

New cases of tuberculosis coming to the knowledge of the Medical Officer of Health otherwise than by formal notification.

Age periods	0-1	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65 & upwards	Total Cases
Pulmonary—												
Males ..	—	—	—	—	—	—	1	3	1	1	—	6
Females ..	—	—	—	1	—	—	—	—	—	1	1	3
Non-pulmonary												
Males ..	—	—	—	—	2	—	—	—	—	—	—	2
Females ..	—	1	—	—	—	—	3	—	—	—	—	4
Totals ..	—	1	—	1	2	—	4	3	1	2	1	15

Source of Information	No. of Cases	
	Pulmonary	Non-Pulmonary
Death (From Local Registrars)	2	1
Returns (Transferable Deaths from Registrar-General)	2	—
Posthumous Notifications	1	1
"Transfers" from other areas (other than Transferable Deaths)	4	4
Other sources if any (specify)	—	—

Notification Register.

After the yearly revision, the number of cases remaining on the Notification Register at the end of the year was :—

Pulmonary.			Non-Pulmonary.			Total Cases
Males	Females	Total	Males	Females	Total	
108	105	213	86	70	156	369

Mortality.

The number of deaths of City residents was 35, equal to a death-rate of 0.5 per 1,000 of the population at all ages. 30, or 85.7 per cent., of the deaths were due to pulmonary tuberculosis, equal to a death-rate of 0.4 per 1,000.

Age and sex distribution of new cases and deaths from tuberculosis, 1938.

Age Periods	New Cases				Deaths			
	Pulmonary		Non-Pulm'ary		Pulmonary		Non-Pulm'ary	
	M.	F.	M.	F.	M.	F.	M.	F.
0—1	—	—	—	—	—	—	—	—
1—5	—	—	1	1	—	—	—	1
5—10	—	1	5	1	—	—	1	—
10—15	3	2	2	—	1	1	—	—
15—25	3	8	2	1	1	3	1	—
25—35	5	8	—	3	3	2	—	2
35—45	10	2	1	—	4	1	—	—
45—55	6	4	1	—	4	—	—	—
55—65	5	3	—	—	5	2	—	—
65 and upwards	2	2	1	—	2	1	—	—
Totals ..	34	30	13	6	20	10	2	3

Period of survival after notification of persons dying during 1938 :—

	Pulmonary	Percentage	Non-Pulmonary	Percentage
Not notified ..	4	13.33	1	20.00
Died before notification	1	3.33	1	20.00
Died within 7 days	—	—	1	20.00
0—1 month ..	5	16.67	—	—
1—3 months ..	7	23.33	—	—
3—6 „ ..	2	6.67	—	—
6—9 „ ..	2	6.67	—	—
9—12 „ ..	—	—	—	—
1—2 years	1	3.33	1	20.00
2—3 „	3	10.00	—	—
3 and upwards ..	5	16.67	1	20.00
Total	30	100.00	5	100.00

The ratio of non-notified tuberculosis deaths to the total tuberculosis deaths was as 1 is to 7.

Total number of deaths and death-rate from tuberculosis during the past five years :—

Year	Number of Deaths	Death Rate
1934	52	0.8
1935	36	0.6
1936	57	0.9
1937	40	0.6
1938	35	0.5

The mortality rate from all forms of tuberculosis is 0.5, and the lowest yet recorded in the City. There were decreases in the deaths of both pulmonary and non-pulmonary types of the disease.

22.8 per cent. of the total deaths occurred in cases not notified or within one week of receipt of notification.

Dispensary Work.

During the year 94 cases, excluding contacts, were examined at the Dispensary. Of these 53 were found to be definitely tuberculous, 43 being pulmonary and 10 non-pulmonary types of the disease.

The number of contacts examined was 47, as compared with 72 in the previous year, viz., 12 adults and 35 children; one female adult contact was found to be suffering from pulmonary tuberculosis.

At the beginning of the year there were 127 pulmonary and 97 non-pulmonary cases, and one case in which the diagnosis was not completed on the Dispensary Register. After the yearly review there remained 139 pulmonary and 94 non-pulmonary cases still on the register.

During the year 13 cases were written off the Dispensary Register as cured, 12 were transferred to other areas or lost sight of, and 29 cases died.

Co-ordination with Medical Practitioners.

During the year 29 cases of suspected tuberculosis were referred by medical practitioners to the Tuberculosis Officer for his opinion. Ten of these were diagnosed as suffering from tuberculosis, and were subsequently notified. The number of cases referred is only a little over half the number for the previous year. This may partly be accounted for by the fact that the Clinical Tuberculosis Officer was off duty for several months on account of illness, and to the same cause may be attributed the reduction in the number of contacts examined.

Sputum Examinations.

The number of examinations of sputum for the presence of tubercle bacilli was 116, in 39 of which the tubercle bacillus was found present. The corresponding figures for 1937 were 97 and 20. The importance of repeating specimens which, on first examination, show a negative result, again requires to be stressed. The ideal, of course, is to have such examinations accompanied by a complete physical examination of the patient.

X-Ray Examinations.

The private arrangements for X-ray examinations made with Dr. R. Connell, Honorary Radiologist to the Cumberland Infirmary, were continued, and 62 cases were referred for examination by the Tuberculosis Officer during the year.

Dental Treatment.

Fourteen patients were referred to a private dental practitioner for treatment.

Extra Nourishment.

During the year 73 cases were supplied with milk, eggs, and butter under the Authority's Tuberculosis Scheme. This nourishment is supplied on the recommendation of the Tuberculosis Officer to patients who, owing to financial difficulties, are unable to obtain a sufficient quantity of these essential foodstuffs, and the provision of these to deserving cases is a valuable aid in keeping up the general resistance of the patients.

Malt and Oil or Virol were also supplied in 33 cases selected by the Tuberculosis Officer.

Housing Statistics of Patients Notified during the year.

Bad housing conditions are a potent cause of spread of tuberculosis, and in any district showing an undue prevalence of this disease one of the first measures to be taken is a survey of the housing conditions of that area.

During the year 14 tuberculous persons, living under overcrowded or other unsuitable conditions, were transferred to Council houses.

The following table shows the housing conditions of patients notified during 1938, who came under Dispensary supervision :—

Type of Case	Patients occupying separate bedroom	Patients occupying separate bed, but not separate bedroom	Patients not occupying a separate bed	Total
Pulmonary ..	25	9	15	49
Non-Pulmonary..	3	2	8	13

Home Visiting.

In connection with the searching out of contacts, and in maintaining regular contact between the patients and the Dispensary, 1,496 visits were paid by the Nurses to homes of patients. The Tuberculosis Officer, in an advisory capacity, also paid home visits to patients who are unable to attend the Dispensary sessions. The number of such visits, including personal consultations with medical practitioners, was 131.

After-Care Work.

During the unavoidable absence of the Clinical Tuberculosis Officer, the Tuberculosis Care Committee (composed of selected members of the Health Committee) did not meet very frequently.

As the result of further consideration, it has been agreed to co-opt members representing outside social and industrial interests in the proportion of one-third of such members to two-thirds members of the Health Committee, and it is hoped that the re-constitution of the committee will increase the scope of its usefulness.

No action was taken under the Public Health (Prevention of Tuberculosis) Regulations, 1925, nor under Section 62, Public Health Act, 1925.

1. Number of Cases on Dispensary Register on January 1st	225	8. Number of visits by Tuberculosis Officers to homes (including personal consultations) ..	131
2. Number of Cases transferred from other areas and cases returned after discharge under Head 3 in previous years	8	9. Number of visits by Nurses or Health Visitors to homes for Dispensary purposes	1496
3. Number of Cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of" ..	12	10. Number of :—	
4. Cases written off during the year as Dead (all causes)	29	(a) Specimens of sputum, etc., examined ..	116
5. Number of attendances at the Dispensary (including Contacts)	919	(b) X-ray examinations made ..	62
6. Number of Insured Persons under Domiciliary Treatment on the 31st December	25	in connection with Dispensary work	
7. Number of consultations with medical practitioners :—		11. Number of "Recovered" cases restored to Dispensary Register, and included in A (a) and A (b) above	—
(a) Personal	—	12. Number of "T.B. plus" cases on Dispensary Register on December 31st	74
(b) Other	29		

(B) Number of Dispensaries for the treatment of Tuberculosis (excluding centres used only for special forms of treatment).

Provided by the Council	One.
Provided by Voluntary Bodies	None.

Institutional Treatment.

Under the Authority's Tuberculosis Scheme patients are admitted to the following institutions :—

(1) *Blencathra Sanatorium, Threlkeld, Cumberland.*

• Here the City of Carlisle has a reservation of 20 beds for pulmonary cases, comprising adults and children. Throughout the year 43 cases in all were dealt with. The average duration of residential treatment in respect of 23 patients discharged during the year was 130 days, 6 staying less than 3 months, 7 over 3 months and less than 6 months, 2 over 6 months and less than 12 months, and 8 over 12 months.

Artificial pneumothorax treatment is given to those cases suitable for such therapy, and arrangements are available with one of the Honorary Surgeons at the Cumberland Infirmary, Carlisle, for the operations of Phrenicectomy and Thoracoplasty.

During the year 2 patients received artificial pneumothorax treatment for the first time, while 4 patients, who had had treatment induced in previous years, continued to attend for refills, and the operation of phrenicectomy was performed in 4 instances, and that of thoracoplasty in 1 instance.

(2) *City General Hospital*

In this Hospital there are available 13 pavilion beds under the supervision of the Tuberculosis Officer. Five of these beds are for the reception of non-pulmonary cases in children, and for these the consultation services of one of the Honorary Surgeons at the Cumberland Infirmary are available.

The remaining 8 beds are reserved for adult cases ; these wards are sub-divided into cubicles, which allows of a separation of the cases according to the different types to be dealt with.

During the year 44 cases were dealt with in these beds, and the average number of beds occupied throughout the year was 8.

(3) *Robert Jones and Agnes Hunt Orthopaedic Hospital, Oswestry.*

Non-pulmonary cases requiring special surgical or orthopaedic treatment are admitted to this Institution. 7 cases were treated here during the year. Of the 4 patients discharged the period of residence varied from 7—40 weeks.

(C) Number of Beds available for the treatment of Tuberculosis on the 31st December in Institutions belonging to the Council.

NAME OF INSTITUTION	For Pulmonary Cases		For Non-Pulmonary Cases		Total
	Adults	Children under 15	Adults	Children under 15	
City General Hospital Pavilions (approved for this purpose by the Ministry of Health) . .	8	—	—	5	13

(D) Return showing the extent of Residential Treatment and Observation during the year in Institutions (other than Poor Law Institutions) approved for the treatment of Tuberculosis.

		In Institu- tions on Jan. 1st.	Admitted during the year	Discharged during the year	Died in the Institu- tions	In Institu- tions on Dec. 31st
Number of doubtfully tubercu- lous cases admitted for observa- tion	Adult males	—	—	—	—	—
	Adult females	—	—	—	—	—
	Children	—	—	—	—	—
	Total	—	—	—	—	—
Number of patients suffering from pulmonary tuberculosis	Adult males	9	20	13	7	9
	Adult females	8	15	9	3	11
	Children	2	3	2	—	3
	Total	19	38	24	10	23
Number of patients suffering from non- pulmonary tuberculosis	Adult males	5	2	5	1	1
	Adult females	—	3	2	—	1
	Children	8	6	8	—	6
	Total	13	11	15	1	8
Grand Total		32	49	39	11	31

PULMONARY TUBERCULOSIS.

Supplementary Annual Return showing in summary form (a) the condition at the end of 1938 of all Patients remaining on the Dispensary Register ; and (b) the reasons for the removal of all cases written off the Register. The Table is arranged according to the years in which the patients were first entered on the Dispensary Register as definite cases of pulmonary tuberculosis, and their classification at that time.

[illegible]

NON-PULMONARY TUBERCULOSIS.

Supplementary Annual Return showing in summary form (a) the condition at the end of 1938 of all Patients remaining on the Dispensary Register; and (b) the reasons for the removal of all cases written off the Register.

[illegible]

(G) Return showing the immediate results of treatment of definitely tuberculous patients discharged during the year from Institutions (other than Poor Law Institutions) approved for the treatment of Tuberculosis.

Classification on admission to the Institution.	Condition at time of discharge	Duration of Residential Treatment in the Institution.															Grand Totals	
		Under 3 m'ths but exceeding 28 days			3—6 months			6—12 months			More than 12 months			Totals				
		M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.		
PULMONARY TUBERCULOSIS.	Class T.B. minus.	Quiescent ..	1	1	..	..	1	..	..	1	..	..	1	1	2	2	5
	Not quiescent ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Died in Institution ..	..	..	..	..	..	..	1	..	..	..	1	..	1	1	..	2
	Class T.B. plus Group I.	Quiescent ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
PULMONARY TUBERCULOSIS.	Class T.B. plus Group I.	Not quiescent ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Died in Institution ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Class T.B. plus Group II.	Quiescent	2	1	..	1	3	6	1	..	7
	Not quiescent ..	2	1	..	1	..	..	..	..	..	1	..	..	4	1	..	5
PULMONARY TUBERCULOSIS.	Class T.B. plus Group II.	Died in Institution ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1
	Class T.B. plus Group III.	Quiescent ..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	1
	Not quiescent ..	1	..	..	..	1	..	..	..	..	..	..	..	1	1	..	2
	Died in Institution ..	2	1	..	..	..	..	1	..	..	..	..	..	3	1	..	4
TOTALS (pulmonary)		6	3	..	4	3	..	3	..	1	4	2	1	17	8	2	27	
NON-PULMONARY TUBERCULOSIS.	Bones and Joints.	Quiescent ..	1	1	2	1	2	..	3	5
		Not quiescent
		Died in Institution	1	1	1
	Abdominal.	Quiescent	1	..	1	1	..	1	2
		Not quiescent
		Died in Institution
	Other Organs.	Quiescent	1	1	1
		Not quiescent
Peripheral Glands.	Died in Institution ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Quiescent ..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	1
TOTALS (non-pulmonary)		1	..	1	1	..	..	1	..	3	2	..	1	5	..	5	10

VENEREAL DISEASES.

During the year 149 persons residing in Carlisle were under treatment or observation for the first time at the Clinic at the Cumberland Infirmary, as compared with 131 in 1937.

25 patients were found to be suffering from syphilis, 2 from soft chancre, 85 from gonorrhœa, and 37 from conditions other than venereal. 4,296 attendances were made by these patients.

2 medical practitioners in the area are entitled to free supplies of arsenobenzol compounds, but no dose was issued during the year.

8 specimens of pathological material for Wassermann re-action were sent on behalf of medical practitioners.

No action was taken under the Venereal Diseases Act, 1917.

Clinics.

Clinics were held on the same days and at the same hours as in the previous year, viz. :—for women and children on Mondays at 2-30 p.m. and Thursdays at 5-30 p.m. The male clinics for syphilis were held on Wednesdays at 2-30 p.m. and Thursdays at 6 p.m., and the male clinics for gonorrhœa on Wednesdays at 6 p.m.

Return relating to all persons who were treated at the Treatment Centre at the Cumberland Infirmary during the year ended the 31st December, 1938.

	Syphilis		Soft Chancres		Gonorrhoea		Conditions other than Venereal		Totals	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1. Number of cases on 1st January under treatment or observation	42	46	—	—	—	—	—	—	76	56
2. Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection	5	—	—	—	8	3	—	—	13	3
3. Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4) suffering from :—										
Syphilis, primary	9	1	—	—	—	—	—	—	9	1
" secondary	1	2	—	—	—	—	—	—	1	2
" latent in 1st year of infection	—	—	—	—	—	—	—	—	—	—
" all later stages	9	10	—	—	—	—	—	—	9	10
" congenital	2	2	—	—	—	—	—	—	2	2
Soft Chancres	—	—	2	—	—	—	—	—	2	—
Gonorrhoea, 1st year of infection	—	—	—	—	120	27	—	—	120	27
" later	—	—	—	—	4	2	—	—	4	2
Conditions other than venereal	—	—	—	—	—	—	46	26	46	26
4. Number of cases dealt with for the first time during the year under report known to have received treatment for the same infection or to have been under observation at other Centres	4	4	—	—	8	5	1	—	13	9
Totals of Items 1, 2, 3, and 4	72	65	2	—	172	47	49	26	295	138

5. Number of cases discharged after completion of treatment and final tests of cure, or after diagnosis as non-venereal	5	2	1	—	77	19	49	24	132	45	177
6. Number of cases which ceased to attend before completion of treatment and were, on first attendance, suffering from :—											
Syphilis, primary	2	—	—	—	—	—	—	—	2	—	2
" secondary	—	4	—	—	—	—	—	—	—	4	4
" latent in 1st year of infection	—	—	—	—	—	—	—	—	—	—	—
" all later stages	6	9	—	—	—	—	—	—	6	9	15
" congenital	2	3	—	—	—	—	—	—	2	3	5
Soft Chancre	—	—	1	—	—	—	—	—	1	—	1
Gonorrhœa, 1st year of infection	—	—	—	—	26	—	—	—	26	—	26
" later	—	—	—	—	3	1	—	—	3	1	4
7. Number of cases which ceased to attend after completion of treatment but before final tests of cure	6	7	—	—	32	5	—	—	38	12	50
8. Number of cases transferred to other centres or to institutions, or to care of private practitioners	6	3	—	—	8	6	—	1	14	10	24
9. Number of cases remaining under treatment or observation on 31st December	45	37	—	—	26	16	—	1	71	54	125
Totals of Items 5, 6, 7, 8, and 9	72	65	2	—	172	47	49	26	295	138	433
10. Number of cases in the following stages of syphilis included in Item 6 which failed to complete one course of treatment :—											
Syphilis, primary	2	—	—	—	—	—	—	—	2	—	2
" secondary	—	—	—	—	—	—	—	—	—	—	—
" latent in 1st year of infection	—	—	—	—	—	—	—	—	—	—	—
" all later stages	1	4	—	—	—	—	—	—	1	4	5
" congenital	1	—	—	—	—	—	—	—	1	—	1
11. Number of attendances :—											
(a) for individual attention of medical officers	938	815	7	—	920	297	110	46	1975	1158	3133
(b) for intermediate treatment, e.g., irrigation, dressing	15	8	35	—	2294	272	106	1	2450	281	2731
Total Attendances	953	823	42	—	3214	569	216	47	4425	1439	5864

13. Number of cases of congenital syphilis in Item 3 above classified according to age periods ..

Under 1 year		1 and under 5 years		5 and under 15 years		15 years and over		Totals	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1	—	—	—	—	2	1	—	2	2

14. (a) Names of chief preparations used in the treatment of syphilis
 (b) Total number of injections given (out-patients and in-patients)

Arsenical	Mercury		Bismuth
	Approved Arsenobenzene Compounds	Others	
Neokharsivan Sulpharsenol Silver Salvarsan Novarsenobillon	Tryparsamide Biarsamide	— — — —	Bismuth Metal " Oxy-chloride
663	83	—	1086

15. Pathological Work :—
 (a) No. of specimens examined at, and by the Medical Officer of the Treatment Centre
 (b) No. of specimens from patients attending at the Treatment Centre sent for examination to an approved laboratory

Microscopical	Cultural for Gonorrhoea		Serum		Cerebro-spinal fluid	Others for diagnosis of Venereal Disease
	For Syphilis	For Gonorrhoea	For Syphilis	For Gonorrhoea		
9	156	—	—	—	—	—
—	305	3	284	122	—	—

The following is the Report of the Clinical Officer (Dr. A. C. B. McMurtrie) :—

During the year 581 persons were dealt with at the Treatment Centres at the Cumberland Infirmary and the Whitehaven and West Cumberland Hospital.

Of these 180 had been carried forward from the previous year, 21 were re-admitted suffering from the same infection, and 380 were new.

Omitting those who were found not to be suffering from Venereal Diseases, there were 264 new cases in 1938, compared with 261 in 1937, an increase of 3.

Thus it is apparent that the incidence of Venereal Disease of all kinds and in both sexes remains practically unchanged.

On further investigation of the figures in the attached table, it is interesting to observe that in item 3 (new cases) the cases of Syphilis declined from 58 in 1937, to 43 in 1938 ; a decrease of 15 ; while the cases of Gonorrhœa rose from 171 to 190, an increase of 19.

As regards syphilis, the position is satisfactory, as the decline in the incidence of this disease, which has been evident for a number of years, continues.

The rise in the incidence of gonorrhœa is disappointing and even alarming. It is, of course, possible that a larger number of the infected resort to the treatment centres now than formerly, but this is unlikely, because there has been no change in the facilities provided for treatment. We must conclude that gonorrhœa was more prevalent in 1938 than in the previous year, in spite of the fact that Sulphanilamide was added to our armament in combating the disease. Is it possible that it would have spread still further if Sulphanilamide had not been discovered, or is Sulphanilamide the reason for the increase ? We cannot say.

In the annual report for 1937, it was pointed out that there was a grave danger that the indiscriminate use of this new drug might result in a large number of people remaining infective because *apparent* cure is so easy to attain, and efficient tests for cure are so seldom carried out except by the specialist.

An important point in this connection is that the Sulphanilamide group of drugs has now (1st January, 1939), been scheduled as a poison, and can no longer be obtained without a prescription. This may be helpful.

What appears to be of far greater consequence is the introduction, in September, 1938, of a new Sulphanilamide substance known as "M. & B. 693." This is referred to later.

Work done in the Treatment Centres.

The attendance is the best index of work done. The total attendance at the two centres was 6,838, which is less than in 1937 by 538. At the Medical Officer's clinics the attendances were 4,033, a decrease of 197; while for intermediate treatment the figure was 2,805, a decrease of 341.

The reduced attendance is accounted for by the smaller number of syphilis cases under treatment, and by the much more rapid cure of the gonorrhœa cases. The latter reason alone accounts for the diminished attendance for intermediate treatment.

In 1936, the total attendances reached the phenomenal figure of 9,501. Since then they have declined, but this does not imply that the work at the clinics is slack. The attendance still exceeds by over 500 that of 1933, in which year the figure recorded was the highest up to that time.

With regard to the work done for the two Authorities, it would appear that the City of Carlisle gets the better value for money than the County of Cumberland. The attendances of patients residing in Carlisle were 4,296; those of patients residing in Cumberland 2,141.

This is almost exactly a proportion of 2 to 1. These figures are, however, very deceptive, because the Carlisle attendances were very largely for intermediate treatment under the supervision of the orderly or nurse.

Reference to the following table where the areas in which patients resided are given shows that there were 166 new patients in Cumberland, and 149 in Carlisle. These figures give a more reliable indication of the work done, at any rate at the Medical Officer's clinics, and taking everything into account, the equal financial responsibility of the two Authorities appears to be a fair enough arrangement.

Areas in which Patients resided.

County County Borough, or Country.	New cases (excluding those previously treated at other Centres).		Attendances all Cases.
Cumberland	166	..	2141
Carlisle	149	..	4296
Westmorland	13	..	130
Scotland	14	..	161
Grimsby	1	..	2
Leicestershire	—	..	3
Essex	1	..	3
London	1	..	28
North Riding	—	..	11
Middlesex	—	..	11
Surrey	1	..	14
Sunderland	1	..	1
Durham	1	..	8
Bolton	—	..	9
Leeds	1	..	1
Northumberland	—	..	2
Newcastle-on-Tyne	—	..	8
Cheshire	—	..	5
Esthonia	—	..	1
Liverpool	—	..	1
Greece	—	..	1
Eire	1	..	1
	350	..	6838

Pathological Examinations.

Wassermann and Gonococcal Complement Fixation tests and other blood serum tests were carried out at the Manchester Public Health Laboratory.

362 Wassermann or other serum tests for syphilis were done for patients attending the clinics, and 55 for patients under private treatment by practitioners in Cumberland and Carlisle.

This shows a decrease of 42 at the clinics, corresponding to the smaller number of cases of syphilis treated.

164 G.C.F. tests were done for the clinics, 9 fewer than in the previous year, and 20 were done for practitioners.

156 microscopical tests were done in the Treatment Centres, and 437 at the Cumberland Pathological Laboratory for the clinics, while 5 were carried out on behalf of practitioners at this laboratory.

Arsenobenzene Compounds.

These were supplied free to any practitioner on the approved list, and during the year 81 doses were issued in this way.

At the Treatment Centres 964 doses were administered, and in addition, 103 doses of other Arsenical compounds were given. This is considerably less than in the previous year, owing to the smaller number of syphilitic patients attending.

The following approved compounds were in use at the Treatment Centres :—

Neokharsivan	Silver Salvarsan
Novarsenobillon	Kharsulphan
Sulfarsenol	

Other Arsenical Compounds used were :—

Tryparsamide	Biarsamide
--------------	------------

Advances in the Treatment of Gonorrhoea with Drugs of the Sulphanilamide group.

In the annual report for 1937, reference was made to Sulphanilamide, and it was predicted that other drugs of the same chemical group might be found to be more effective.

Three of these have been tried in the clinics, "Proseptacine" (May & Baker), "Uleron" (Bayer), and "M. & B. 693" (May & Baker).

Proseptacine was found to be less toxic, but also much less effective than Sulphanilamide. Uleron, a German product, has been more extensively used in that country than in this. It has relatively little effect in the early stage of the disease, but after the lapse of a week or two it appears to be more efficient than Sulphanilamide, and a number of cures were obtained in cases where the latter had failed. Unfortunately it is more dangerous, and one severe case of poisoning was encountered.

About the end of June, 1938, through the kindness of the makers, Messrs. May & Baker, Dagenham, liberal supplies of their new product, "M. & B. 693," were obtained for trial a considerable time before it was put on the market.

This drug has now superseded all others in the treatment of gonorrhoea. It is apparently slightly more toxic than Sulphanilamide, but this objection is counterbalanced by the much shorter duration of treatment required. It was found that Sulphanilamide had to be given for three weeks to obtain the best results, and even then there was about 30% of failures. It was not very effective in the early stage of the disease, and consequently in some treatment centres ten days were allowed to elapse before it was given. Relapses occurred, and were sometimes so slight that they escaped notice, and patients were apt to remain carriers if they omitted to attend for observation and tests.

M. & B. 693 was given at first for ten days. This was later found to be unnecessary, and the period was reduced

to seven days. Now it is found that five days, as a rule, are enough. Almost 100% of cures can be relied upon, and the drug takes effect on the first day of the appearance of the disease.

It is, of course, necessary to adhere strictly to the instructions given regarding correct dosage, diet, etc. It is also considered safer to carry on with local treatment as formerly.

Although outside the scope of this report, it is interesting to note that this drug was introduced primarily for the treatment of Pneumonia and that the *Pneumococcus*, *Meningococcus* and *Streptococcus*, as well as the *Gonococcus* are destroyed by it. It has met with very remarkable success in cases of Pneumonia.

It is tolerated best by the young and physically fit, especially those who are engaged in manual work. Often they are not upset by it in any way, and some have even said that it improves the appetite. Women, as a rule, do not take it so well as men, and have to be content with smaller doses. A number of cures, however, have been effected with doses much smaller than usual, where there was marked intolerance.

With regard to the way in which the drug acts, there is still doubt. It is now generally supposed that Sulphanilamide acts in combination with the body fluids, and that the old process of establishing immunity has to be carried out before the germs are destroyed. M. & B. 693, on the contrary, seems to have a direct lethal action on the germ, and to be able to exterminate it without the aid of antibodies in the blood. Hence the much earlier stage of the disease, when it is effective and the shorter duration of treatment.

All this sounds too good to be true. The prospect of a successful issue in the war against the *Gonococcus* is much more hopeful than it was a year ago, and if every carrier could be persuaded to undergo treatment for a few days, the disease would completely disappear from the community.

The Treatment Centre at the Cumberland Infirmary.

Clinics were held by the Medical Officer, as in previous years, on three days a week (five sessions), and, in addition, the premises were open daily for the Intermediate Treatment of patients of both sexes under the supervision of the Medical Orderly or Nurse.

The total attendances decreased by 463 to 5,864.

Analysis of this shows :--

	Attendances.		Decrease.	
Medical Officer's Clinics	..	3133	..	92
Intermediate Treatment	..	2731	..	371

The decrease, as pointed out in the first part of this report, was due partly to the smaller number of new cases of syphilis (36 compared with 44 in 1937), and partly to the much shorter average duration of treatment of gonorrhœa, although the number of new cases increased considerably (153 compared with 135 in 1937).

The prevalence of venereal disease has declined in Cumberland, while it has increased in Carlisle

		NEW CASES.					
<i>Cumberland.</i>			<i>Carlisle.</i>				
1937.	1938.	Difference.	1937	1938.	Difference		
Syphilis	..16	.. 8	.. 8	.. 21	.. 25	.. + 4	
Gonorrhœa	42	.. 44	.. +2	.. 67	.. 85	.. +18	
		58	.. 52	.. -6	.. 88	.. 110	.. +22

In Cumberland syphilis decreased by 50%, and gonorrhœa only increased by 4.8%, while in Carlisle syphilis increased by 19%, and gonorrhœa by 26.9%. Admittedly the number of cases is too small to make accurate percentage calculations, but in Cumberland there is an almost indential decline recorded at the Whitehaven Treatment Centre, and this confirms the evidence to some extent.

There is one conclusion which can fairly be drawn. In any future propaganda campaign all efforts should be concentrated on Carlisle rather than Cumberland, as has been done in the past.

Plans for the construction of a new treatment centre at the Cumberland Infirmary have been completed and approved by the Ministry of Health. Apart from this no further steps have been taken to improve the facilities for out-patient treatment or to provide in-patient accommodation.

In-patients under Treatment in 1938 at other Hospitals.

		Newcastle.		Leeds.		Total.
Admissions in 1938	..	6	..	2	..	8.
Total Number Treated	..	8	..	2	..	10
Total In-patient Days	..	454	..	224	..	678

In addition one patient was successfully treated with Malaria for General Paralysis at The Garlands Mental Hospital, and has resumed his normal occupation and also his attendance at the clinic. At the time of writing this report two others are under treatment, one at Dumfries and one at The Garlands for similar conditions. All of these were admitted as voluntary patients. The advantages of this arrangement are very great, as it is often difficult or impossible to certify such people as insane, especially in the early and curable stage of the disease.

MATERNITY AND CHILD WELFARE.

1,131 notifications of births, being 17 more than in 1937, were received during the year ; 1078 of these related to live-births, and 53 to still-births ; 1102 notifications were by midwives, and 25 by a doctor or by a person living in the house. In addition, in 4 instances, a reminder of the statutory duty of notification was necessary.

Health Visitors.

The following is a summary of the visits paid by the Corporation Health Visitors :—

Total number of visits to homes	..	..	..	13,950
Primary visits in connection with the notification of births	..	..	..	1,092
Re-visits to children between :—				
0—1 year	..	..	..	4,319
1—5 years	..	..	..	11,514
			————	15,833
Total number of routine visits to children	..	..		16,925
Visits to children nursed or maintained by persons other than the parents	..	..	..	155
Visits to expectant mothers :—				
Primary	..	..	..	267
Re-visits	..	..	..	480
			————	747
Visits in connection with—				
Deaths of children under 1 year	..	..		54
Ophthalmia Neonatorum	..	..	..	27
Pemphigus Neonatorum	..	..	..	2
Diarrhœa	..	..	..	35
Bronchitis	..	..	..	90
Broncho-pneumonia	..	..	..	34
Acute Lobar and Influenzal Pneumonia	..			37

Measles—

Under 5 years	..	..	..	507	
Over 5 years	..	..	..	328	
Re-visits	..	..	..	211	
				—	1046

Whooping Cough—

Under 5 years	..	..	..	65	
Over 5 years	..	..	..	16	
Re-visits	..	..	..	70	
				—	151

Chickenpox	..	..	..	..	..	13
Visits to Child Welfare Clinic	..	..	..	..	..	54

Inspection of Midwives.

Of the 28 midwives who notified their intention to practice during the year, 5 removed from the City, 2 surrendered their certificates under the provisions of the Midwives Act, 1936, and the remainder were engaged in the Domiciliary Midwifery Service, Nursing Homes, Public Institutions, Private Practice, or by the District Nursing Association.

During the year the Domiciliary Midwives attended 305 cases as midwives, and 150 cases as maternity nurses.

Notices from practising midwives, in accordance with the Rules of the Central Midwives' Board, were received in respect of the following conditions :—

Cases in which a midwife called for the assistance of a medical practitioner	..	..	..	..	194
Notification of the intention to substitute artificial for breast feeding	..	..	..	..	64
Notification of still-births	..	..	..	..	7
Notification of liability to be a source of infection	..				4
Notification of the death of a baby	..	..			2

The conditions for which medical help was advised were as follows :—

Condition of Mother—

Ante-natal	11
Œdema and Albuminuria	5
Hæmorrhage	2
Miscellaneous	4
During Labour	51
Uterine inertia	30
Malpresentation	12
Hæmorrhage	5
Miscellaneous	4
Post-natal—	101
Retained Membranes or Placenta ...	4
Ruptured Perineum	85
Rise of Temperature	7
Hæmorrhage	1
Miscellaneous	4
Condition of Child	31
Feebleness	5
Inflammation of the Eyes	18
Prematurity	5
Miscellaneous	3

The following were stated as the reasons for the substitution of artificial feeding or supplementary feeding :—

Mothers' milk insufficient	25
Tuberculosis	1
Poor condition of mother	8
Malformation of breast	3
Mother returning to work	13
Baby transferred to Hospital	1
Premature babies	3
Ill babies	1
Mothers transferred to Hospital ..	2
Mothers refused to breast feed ..	7
	—
	64
	—

All the practising midwives, including the domiciliary midwives, were visited once in their own homes, and their bags, outfits, and registers inspected.

Letters in connection with the Rules of the Central Midwives' Board and other matters were written to midwives, as follows :—

Reminder to forward registers and ante-natal records for inspection	41
<i>Re</i> administration of gas-air analgesia apparatus ..	22
<i>Re</i> compensation claims	2
<i>Re</i> domiciliary midwifery service	3
<i>Re</i> failure to notify birth	1
<i>Re</i> notification of attendance on a lying-in woman after the fourteenth day	1
<i>Re</i> payment of midwives fees by Local Authority ..	1
<i>Re</i> surrender of certificate	4
<i>Re</i> uniform for external midwives	1
<i>Re</i> air-raid precautions	6
<i>Re</i> relief midwife	1
<i>Re</i> appointment of domiciliary midwife	20
<i>Re</i> returns of confinements	2

Corporation Maternity Home.

The following particulars relate to the work of the Maternity Home :—

Patients in Hospital on 31st December, 1937	..	12
Admitted during year	.. .. .	329
		<hr/> 341 <hr/>
Average duration of stay	.. .. .	14 days
Number of cases delivered by midwives	.. ..	307
Number of cases delivered by a doctor	.. ..	12
Total number of confinements	.. .. .	319
Abortion, miscarriage	.. .. .	2
Number of cases treated ante-natally only	.. ..	3
Puerperal Pyrexia notified	.. .. .	6

Medical help was called for in connection with 77 deliveries. The most important abnormalities were :—

Eclampsia	.. .. .	4	Breech Presentation	..	2
Albuminuria	.. .. .	14	Adherent Placenta	..	1
Ante-Partum Hæmorrhage	..	7	Hyperemesis	.. ..	1
Post-Partum Hæmorrhage	..	2	Face presentation	..	1
Cardiac disease	.. .. .	7	Breast Abscess	.. ..	2
Hydrocephaly	.. .. .	1			

Obstetrical operations were performed as follows :—

Cæsarean Section	.. .. .	1	Induction of Labour—		
Forceps	.. .. .	8	Rupture of Membranes	..	6
Manual Removal of Placenta	..	1	Tube induction	.. ..	19
Repair of perineum	.. .. .	46			

There were 18 still-births in the following circumstances :—

Ante-partum hæmorrhage	..	3	Cerebral Hæmorrhage		
Albuminuria	.. .. .	3	(maternal)	..	1
Anencephalous	.. .. .	1	Hydrocephalous	.. ..	1
Eclampsia	.. .. .	2	Hyperemesis	.. ..	1
			Cause unknown	.. ..	6

Seven deaths occurred before the age of ten days, and the causes were as follows, viz. :—prematurity, 2 ; hydrocephaly, 1 ; congenital aortic endocarditis, 1 ; maternal toxæmia, 3.

Ante-natal Clinic.

The number of attendances by expectant mothers was 2,199, or 207 more than last year ; 479 were first visits of new patients. Of the latter figure, 134 were cases referred by doctors or midwives. The number of complete examinations made was 1,005, an average of 2.1 per patient. The average number of ante-natal visits per patient was 4.6. 28 cases were found at the ante-natal clinic to present some abnormality.

Post-natal Clinic.

On discharge from Hospital patients are given a card showing the date when they are expected to attend the post-natal clinic, during the year 212 availed themselves of this service.

Infant Consultations.

At the Child Welfare Clinic 341 children attended, making a total of 3,040 attendances. Of these 2,375 were of children under one year of age, and 665 of children between the ages of 1 and 5 years. 490 were first attendances of new cases.

With 190 new cases under one year seen at the Voluntary Centre, 63.0 per cent. of the total number of live births notified were under supervision at Welfare Centres, *i.e.*, 18.4 per cent. more than in 1937.

Thirty-one cases were referred to Dr. J. A. Ross, Ophthalmic Surgeon, for examination, and 98 cases were referred to the School Dental Officer for examination and treatment.

Forty children received operative treatment in the City General Hospital for diseases of the ear, nose and throat.

Voluntary Agency.**BABIES' WELCOME AND SCHOOL FOR MOTHERS.**

The following is a general summary of the work of the Centre :—

Number of sessions held :	..	..	..	..	128
Attendances of children—					
First attendances, aged 0—1 year	..				190
aged 1—5 years	..				57
Subsequent Attendances,					
aged 0—1 year	..				2,098
aged 1—5 years	..				3,183
				————	5,528
Attendances of mothers—					
First attendances	..	..	..		189
Subsequent attendances	..	..	..		4,391
				————	4,580
Classes and addresses—					
Mothercraft and Hygiene	..	..			128

WELFARE NURSE.

Total number of visits to homes	..	..	..		2,355
Visits to children—					
0—1 year	..	..	..	..	2,084
1—5 years	..	..	..	..	1,812
				————	3,896
Visits to expectant mothers—					
First visits	..	..	..	..	116
Re-visits	..	..	..	..	146
				————	262
Number of attendances at Babies' Welcome	..				128

Free Provision of Milk, &c., by the Corporation.

8,162 gallons of milk were supplied free of cost to 513 families for the purpose of assisting the feeding of infants and to nursing mothers. In addition, 178 expectant or nursing mothers received colact, and 182 expectant mothers fruit and cereals.

Still-births.

The number of still-births notified was 53, the same number as the previous year. Of this number 14 were born of parents not ordinarily resident in the City, a large proportion of which were in connection with difficult deliveries. The total still-birth rate was 46.8 per 1,000, or 0.7 per 1,000 less than in 1937. All the still-births were registered preliminary to burial in the Carlisle Cemeteries. The still-birth rate for the Carlisle area alone was 34.5 per 1,000, 3.1 per 1,000 more than in 1937. In 18 cases no doctor was present at the birth. Maternal conditions accounted for the still-birth in 13 cases, viz. :—

Albuminuria ..	.	..	..	..	..	5
Eclampsia ..	..	..	..	..	..	3
Ante-partum haemorrhage ..	..	..	..	..	..	2
Caesarean section—after long labour	..	..	..	..	..	2
Hyperemesis ..	..	..	..	..	..	1

The causes of the remaining still-births were :—

Prolapse of cord ..	..	..	..	..	..	3
Anencephalus ..	..	..	..	..	..	3
Difficult delivery ..	..	..	..	..	..	3
Spina bifida and talipes ..	..	..	..	..	..	2
Difficult breech delivery ..	..	..	..	..	..	2
Encephalocele ..	..	..	..	..	..	1
Prematurity ..	..	..	..	..	..	1
Cord round neck ..	..	..	..	..	..	1
Hydrocephalus ..	..	..	..	..	..	1
Placenta praevia ..	..	..	..	..	..	1
Monster ..	..	..	..	..	..	1
Unknown ..	..	..	..	..	..	21

Infant Mortality,
with deaths from stated causes, at various ages and in various seasons, of children under one year of age.

CAUSE OF DEATH	AGE						MONTH												Total Deaths under One Year			
	Under 1 Week	1-2 Weeks	2-3 Weeks	3-4 Weeks	Total under 4 Weeks	4 Wks. & under 3 Months	3 Months and under 6 Months	6 Months and under 9 Months	9 Months and under 12 Months	January	February	March	April	May	June	July	August	September		October	November	December
All Causes { Certified .. { Uncertified ..	22 1	4 —	1 —	3 —	30 1	9 1	2 2	2 —	4 1	5 1	5 —	9 1	4 —	4 1	7 —	1 —	4 —	— —	3 1	3 1	2 —	47 5
Congenital Syphilis ..	—	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1
{ Bronchitis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	2
{ Pneumonia (all forms)	—	—	—	—	—	3	1	1	2	1	—	3	1	—	—	—	—	—	1	1	—	7
Enteritis and Gastro-Enteritis ..	—	1	—	—	1	2	—	—	—	—	—	—	—	1	1	—	1	—	—	—	—	3
Measles ..	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	—	—	—	—	—	1
Whooping Cough ..	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	2
Prematurity ..	15	2	—	—	17	2	—	—	2	—	—	1	—	1	4	1	2	—	1	2	—	19
{ Congenital Defects ..	6	—	—	1	7	2	—	1	—	1	—	2	1	1	—	—	1	—	1	1	—	10
{ Atrophy, Debility & Marasmus ..	—	—	1	—	1	—	1	—	—	—	—	—	1	1	—	—	—	—	—	—	—	1
Acute Nephritis ..	—	—	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Streptococcal Parotitis ..	—	—	—	1	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Hæmorrhagic Disease ..	1	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1
Hernia Cerebro ..	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Rupture of Lung at Birth ..	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1
Primary Anæmia ..	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1

**Rates of Mortality among Infants at various ages, and
from the principal causes, per 1,000 births.**

Year	Net Infant Mortality Rate	AGES					CAUSES					
		Under 4 Weeks	4 Weeks and under 3 Months	3 Months and under 6 Months	6 Months and under 9 Months	9 Months and under 12 Months	Not Preventable			Preventable		
							Premature Birth	Atrophy, Debility & Marasmus	Congenital Malformations and Atelectasis	Diarrhoea and Enteritis	Bronchitis and Pneumonia	Measles and Whooping Cough
1929	69.4	28.0	6.7	8.7	11.5	14.5	11.5	2.9	14.5	1.9	21.2	11.5
1930	65.5	36.2	11.7	10.8	3.9	2.9	19.6	4.9	12.7	8.8	7.8	2.9
1931	65.2	26.6	10.9	6.9	9.9	10.9	10.9	2.9	9.9	2.9	15.8	8.9
1932	81.6	40.8	14.6	9.7	6.8	9.7	21.3	0.9	10.6	7.7	20.4	3.8
1933	72.2	34.4	10.0	10.0	12.2	5.5	17.7	4.4	6.6	4.4	22.2	2.2
1934	60.9	36.6	6.6	7.8	5.5	4.4	24.3	1.1	11.1	3.3	5.5	3.3
1935	67.6	39.2	11.9	5.5	5.5	5.5	19.6	7.6	11.9	6.5	9.8	3.2
1936	77.6	38.8	11.9	14.0	7.5	5.4	21.5	2.1	12.9	7.5	21.5	1.1
1937	49.1	32.8	3.8	8.7	2.9	0.9	25.0	1.9	4.8	1.9	10.6	0.0
1938	46.3	27.6	8.9	3.5	1.7	4.4	16.9	0.8	8.9	2.6	8.0	2.6

Infant Mortality Rates for the various Wards, 1929-1938.

Year	Stanwix & Etterby	Rickergate	Aglionby	Greystone	St. Nicholas	Currock	Denton Holme	St. Cuthbert's	Caldewgate	Newtown & Belle Vue	Carlisle
1929	0.0	60.2	27.0	42.3	32.9	97.5	101.0	19.6	117.6	107.1	69.4
1930	40.8	56.1	49.1	55.5	85.3	94.4	77.6	49.5	108.1	36.6	65.5
1931	45.4	42.1	84.7	40.0	160.9	69.2	65.2	66.0	90.9	28.5	65.2
1932	21.7	35.7	100.0	109.1	137.5	58.8	115.3	83.3	57.6	90.4	81.6
1933	52.6	19.4	100.0	60.8	100.0	74.3	77.9	103.8	100.0	88.0	72.2
1934	58.8	30.9	50.0	65.5	14.4	77.5	145.8	14.9	75.9	48.1	60.9
1935	51.7	26.1	71.4	37.7	111.1	91.6	67.6	64.1	64.9	85.4	67.6
1936	17.5	48.5	74.0	32.5	109.3	70.8	12.5	107.1	111.1	93.0	77.6
1937	12.9	40.8	44.1	53.3	41.6	64.1	71.4	29.8	53.3	50.8	49.1
1938	12.8	25.6	56.6	27.5	63.3	51.6	72.2	48.2	61.8	55.5	46.3

Infant Mortality in Relation to the Mode of Feeding.

The following table shows the deaths of infants under one year in relation to the mode of feeding.

1938.							
MODE OF FEEDING.	Number so Fed.			Number of Deaths			
	Legitimate	Illegitimate	Total	Legitimate	Illegitimate	Total	
Breast	511	29	540	16	—	16	29.6
Partly Breast and Partly Bottle .. .	143	18	161	5	1	6	37.2
Bottle	366	14	380	9	2	11	28.9
Spoon Fed	5	—	5	4	—	4	800.0
Pipette Fed	3	—	3	2	—	2	666.6
Not Fed	12	2	14	12	1	13	928.5

Infant Mortality.

The total number of deaths of infants under one year in the City was 52, giving a net infant mortality rate of 46.3 per 1,000, 2.8 per 1,000 less than for 1937, and the lowest ever recorded in the City. 31 or 59.6 per cent. of the total occurred before the age of four weeks, and 17 of these were due to prematurity.

The number of deaths of legitimate children was 48, or 45.3 per 1,000. The number of deaths of illegitimate children resident in the City was 4, equal to a rate of 63.5 per 1,000.

Illegitimacy.

The number of illegitimate births registered was 63, being 56.1 per 1,000 registered births, or 11.3 per 1,000 less than in 1937.

Infant Life Protection.

The Health Visitors paid 155 visits as Infant Protection Visitors to children nursed or maintained by persons other than the parents :—

Number of foster-parents on the Register at the	21
end of the year 	

Number of children on the Register—

(a) At the end of the year 	23
(b) Who died during the year 	1
(c) On whom inquests were held during the	
year 	—

Maternal Mortality.

Ten maternal deaths occurred within the City, 5 of which were of mothers resident within the City, and 5 of mothers whose residence was in the County Area.

The deaths of the City residents were found to be due to eclampsia, 2 ; cerebral haemorrhage, 1 ; cerebral thrombosis,

1 ; central placenta praevia, 1 ; The mortality rate was 4.2 per 1,000 total births. The rate for the five years period, ended 1938, was 3.7, and the figure for the separate years was as follows :—

1934	..	..	..	..	..	5.6
1935	..	..	..	..	..	1.1
1936	..	..	..	..	..	2.0
1937	..	..	..	..	..	5.5
1938	..	..	..	..	..	4.2

In 1934, however, the Registrar-General did not attribute any deaths from child-birth to the City, so that the maternal mortality rate for the last five years may be said to be 2.5.

Puerperal Pyrexia.

Twenty-one notifications of puerperal pyrexia were received, 13 of which were treated in hospitals. No death occurred among these patients. Eight of the cases notified came from the County area to have their confinements in Carlisle.

Nursing Homes.

There are four registered Nursing Homes in the City, and these have been visited by the Medical Officers.

Ophthalmia Neonatorum.

Twenty cases of Ophthalmia Neonatorum were notified by Medical practitioners. In nine instances both eyes were affected, but in no case did permanent damage result. Five cases were treated in hospital, and the Nurses of the District Nursing Association undertook the treatment of 11 severe cases under the supervision of the doctor in charge of the case. The remainder of the cases were treated at home under the direction of the Medical Practitioner in attendance, and at the end of the year one patient was still under treatment.

CASES.			Vision un- impaired	Vision impaired	Total Blind- ness	Deaths during treat- ment	Number still under treatment at end of the year
Noti- fied	Treated						
	At Home	In Hos- pital					
20	15	5	19	—	—	—	1

Infectious Diseases.

The Health Visitors paid 1,232 visits in cases of zymotic diseases ; the number of visits in this connection being 697 more than in 1937.

Deaths, 1—5 Years.

Scarlet Fever	..	..	..	..	1
Measles	..	..	..	..	3
Diphtheria	..	..	..	..	1
Cerebral Tuberculosis	..	..	..	..	1
Mongolism	..	..	..	..	1
Status Lymphaticus	..	..	..	..	1
Glioma of optic nerve	..	..	..	..	1
Streptococcal Tonsillitis	..	..	..	..	1
Strangulation of Small Intestine	..	..	..	..	1
Enteritis	..	..	..	..	2
Pneumonia	..	..	..	..	5
Accidents	..	..	..	..	2

VETERINARY INSPECTION.

In accordance with the provisions of Part IV. of the Agricultural Act, 1937, which came into operation on the 1st April, 1938, the functions of Veterinary Inspectors in Great Britain under the Diseases of Animals Acts, 1894—1935, and any enactments relating to Milk or to Dairies were transferred from Local Authorities to the Minister of Health. Consequently the duties of the Veterinary Inspector of the City were considerably reduced, and now comprise veterinary attendance of the Corporation horses, work in relation to the examination of animals conveyed by rail, etc., and consultant work in connection with the Corporation Slaughter-houses.

REPORT

OF

SANITARY INSPECTOR

To the Medical Officer of Health.

SIR,

I beg to submit a report upon the work of the Sanitary Inspectors during the year 1938

Your obedient Servant,

W. HANSON,

Sanitary Inspector.

SERVICE OF NOTICES.

The total number of notices served was 360, of which 13 were statutory. There were 83 notices outstanding at the end of the year. The following tables give particulars of the inspections made, which show a general increase, and the works executed as a result of notice, or following verbal intimation or interview with owners, agents, etc.

Particulars of the notices served are as follows :—

Public Health Acts—

Preliminary	..	..	..	..	..	..	287
Statutory		..	..	..	..	..	1
Factories Act	..	..	..	..	..	..	27
Shops Acts—							
Preliminary	..	..	..	..	..	..	83
Statutory	..	..	..	..	..	..	12
Total							360

No. of Complaints received	381
----------------------------	----	----	----	----	-----

SANITARY INSPECTION OF THE DISTRICT.

Houses inspected <i>re</i> Infectious Diseases	..	..	958
" " Dirty Conditions	..	..	14
" " Animals kept	..	..	10
" " Sanitary Accommodation	..		136
" " Nuisances	..	..	1,428
" " Rats and Mice Destruction Act			250
" " Water Supply	..	..	44
No. of Complaints investigated	..	..	381
No. of Interviews (Owners, Tradesmen, etc.)		..	1,548
No. of Smoke Observations	..	..	16
No. of Inspections of Courts and Lanes	..	..	160
" " Vans, Tents, Sheds, etc.	..		226
" " Entertainment Houses	..		50
" " Schools	..	..	135
" " Factories with Mechanical Power			428
" " Factories without Mechanical Power			93
" " Meat Preparation Premises	..		232
" " Bakehouses	..	..	175
" " Shops (Shops Act)	..	..	520
" " Shops (Meat and other Foods)			117
" " Dairies	..	..	119
" " Cowsheds	..	..	70
" " Ice-cream premises	..	..	63
" " Slaughter-houses	..	..	512
" " Markets	..	..	162
" " Fried Fish Shops	..	..	45
" " Offensive Trade Premises	..		14
" " Stable Premises	..	..	68
" " Drains	..	..	621
" " Refuse Tips	..	..	142
" " Lavatories and Urinals	..		80
" " Watercourses	..	..	28
" " Lodging-houses	..	..	26
" " <i>re</i> Merchandise Marks Act	..		131
" " <i>re</i> Poisons and Pharmacy Act	..		2
" " <i>re</i> Offensive Accumulations	..		68
No. of Miscellaneous Inspections	..	..	1,244

WORKS EXECUTED.

HOUSES :—					<i>By</i> <i>Notice.</i>	<i>Without</i> <i>Notice.</i>
Provided with sufficient sanitary accommodation	..	..	..	20	..	—
Disinfected	..	..	..	—	..	327
Yards paved or repaired	..	..		15	..	4
Spouting fixed or repaired	..	..		42	..	3
Provided with a sufficient supply of water	..	..	..	23	..	2
Spouting disconnected from drain	..			13	..	—

FACTORIES WITH MECHANICAL POWER—

Sanitary Accommodation improved	..	5	..	—
„ „ cleansed and repaired		2	..	—
„ „ additional provided		2	..	—
Cleansed or linewashed	..	4	..	—
Grit improved	..	1	..	—
Automatic stokers installed	..	1	..	1

Factories without mechanical power—

Cleansed or linewashed	..	7	..	1
Lighting and ventilation improved	..	2	..	—
Sanitary accommodation improved	..	5	..	—
„ „ additional provided		1	..	—

BAKEHOUSES :—

Cleansed or linewashed	..	9	..	1
Washing facilities provided	..	2	..	—
Ceilings lined	..	2	..	—

MEAT PREPARATION PREMISES—

Tripe cleaning and gut scraping discontinued	..	6	..	—
Cleansed or linewashed	..	4	..	—
Grease trap fitted to drain	..	2	..	—
New chill installed	..	—	..	1

				<i>By</i>	<i>Without</i>
				<i>Notice.</i>	<i>Notice.</i>
MILK AND DAIRIES ORDER :—					
Byres—					
Walls limewashed and woodwork cleansed	—	..	7		
Milkshops---					
Cleansed or limewashed	1	..	—		
Cooling apparatus installed	—	..	1		
Proper covered milk vessels provided	1	..	—		
ICE CREAM PREMISES—					
Cleansed and limewashed	—	..	1		
Drains repaired	—	..	1		
FRIED FISH SHOPS :—					
Sanitary conditions improved	—	..	1		
ENTERTAINMENT HALLS :—					
Decoration improved	—	..	2		
Cleansed	—	..	2		
New seating	—	..	1		
Ventilation improved	—	..	1		
TENTS, VANS, SHEDS, &c. :—					
Nuisances abated	1	..	—		
Removed from unsatisfactory site ..	1	..	—		
COURTS AND LANES :—					
Walls limewashed	1	..	—		
DRAINAGE :—					
Constructed (new)	190	..	6		
Inspection chambers built	2	..	—		
Self-cleansing gullies provided ..	64	..	7		
Cleansed or repaired	48	..	4		
Openings removed from inside buildings	1	..	—		
Reconstructed (old)	10	..	—		
Smoke, chemical or water tested ..	—	..	76		
Ventilated	1	..	—		
Intercepting traps fitted	1	..	—		
Opened out for inspection	3	..	—		

	<i>By</i> <i>Notice.</i>	<i>Without</i> <i>Notice.</i>
SINKS AND OTHER SANITARY FITTINGS :—		
New sinks fixed	70	12
Waste pipes trapped or repaired ..	67	10
Bath or W.H.B's. fixed	—	2
Waste pipes disconnected from drains..	3	—
WATER-CLOSETS :—		
Repaired or cleansed	15	—
Provided with sufficient water supply	1	—
New cisterns fixed	13	1
Cisterns repaired	4	—
W.C's. provided for other types ..	15	3
New W.C's. provided	17	5
W.C's. abolished	1	—
STREAMS AND WATERCOURSES :—		
Cleansed	—	1
NUISANCES :—		
Arising from the keeping of swine or other animals, abated	1	—
Arising from the emission of smoke, abated	3	—
MIDDEN PRIVIES :—		
Abolished	2	—
OFFENSIVE TRADES :—		
Improved method of deodorisation ..	1	—
SHOPS :—		
Sanitary accommodation improved ..	2	—
„ „ „Additional provided	7	—
„ „ „cleansed ..	2	—
Washing facilities provided or improved	13	1
Ventilation improved	1	—
Seats provided for female assistants ..	1	—
Notice provided <i>re</i> above	1	—
Facilities provided for taking meals ..	—	1
Lighting improved	1	—
Basement cleansed	1	—

By Without
Notice. Notice.

STABLES :—

New drains provided	1	..	—
Drain inlets removed from inside ..	1	..	—
Cleansed	5	..	—
Middens provided or repaired	2	..	—

OFFENSIVE ACCUMULATIONS REMOVED 16 .. 5

MISCELLANEOUS :—

Not classified above	12	..	1
------------------------------	----	----	---

**Structural Improvements effected under the Public
Health Act.**

DWELLING-HOUSES :—

Rendered free from dampness	5	..	—
Roofs re-constructed or repaired ..	23	..	13
External walls pointed and repaired ..	12	..	21
Chimneys repaired or pointed	2	..	3
Internal walls and ceilings plastered or repaired	14	..	2
Fireplaces repaired	4	..	1
Windows repaired	10	..	22
Doors and casings repaired	1	..	1
Floors repaired or relaid	11	..	—
Plinths, Jambs and sills cemented ..	6	..	20
Wash boilers repaired	3	..	—
Outbuildings repaired, etc.	4	..	—
Sub-floors concreted	—	..	2
Coal stores provided or re built ..	9	..	3
Damp-proof course inserted in wall ..	—	..	1
Ovens repaired	1	..	—
Gas cooker removed from W.C. apart- ment	1	..	—

SANITARY CONVENIENCES, LAVATORIES AND DRAINAGE.

The closet accommodation provided for the dwelling houses in the City is almost wholly on the water carriage system, consisting mainly of the washdown and short hopper types. The exceptions are 8 pail-closets, 3 chemical closets, and 6 conveniences of the privy midden type in connection with property mainly on the outskirts of the town, or to which a sewer is not reasonably available.

At 4 schools the conveniences are of the obsolete trough pattern with a total of 25 compartments, and there are obsolete conveniences at 5 factories, matters which are receiving attention.

The Public urinals number 20, including one newly erected on the site of a former convenience at Rome Street. These conveniences receive daily attention. The two underground lavatories are staffed by attendants, who also supervise three other conveniences in the Public Parks.

Drainage works on private property necessitated 621 inspections. The number of new drains laid under our supervision was 196. Water, smoke or chemical tests were applied to 76 drains.

AIR POLLUTION.

Sixteen observations of smoke from factory chimneys were made, and as a result, 6 letters were addressed to factories respecting emissions of smoke or grit. In consequence of informal action, improvements and additions were made to the grit extractors at one factory. On other premises an intermittent nuisance was abated by the introduction of automatic stoking apparatus to a boiler previously hand fired.

OFFENSIVE TRADES.

Offensive trades, as extended under the Public Health Act, 1936, number 6, i.e., 1 fellmonger, 1 tripe boiler, 3 rag and bone dealers, and 1 gut scraper. The latter business is

conducted on premises adjoining the Public Slaughterhouses. During the year the owners of the latter introduced an improved method for deodorising offensive gut, rendering the immediate vicinity inodorous.

FACTORIES.

• 696 inspections were made to power and non-power factories, and 27 notices were served upon occupiers of factories in relation to defects or nuisances. Particulars as to numbers and classification appear in the appendix.

There was no instance of outwork in unwholesome premises.

FOOD AND DRUGS (ADULTERATION) ACT.

The samples submitted to the Public Analyst during the year, 155 in number, were representative of almost all kinds of food stuffs, particulars of which are on page 105. 143 samples were declared by the Analyst to be genuine and 12 adulterated. Particulars of the adulterated samples, and the action taken thereon are as follows :—

PARTICULARS OF ADULTERATED SAMPLES.

<i>Ref. No.</i>	<i>Article.</i>	<i>Remarks.</i>	<i>Action taken.</i>
28	..Milk	..Slightly below standard in fat	..Letter from Town Clerk.
29	..Milk	..Slightly below standard in fat.	..Letter from Town Clerk.
30 & 31	..Milk	..Deficient in non-fatty solids	..Contained added water. "Appeal to cow" sample deficient in N.F.S., but normal under Hortvet (freezing) test. Letter from Town Clerk.
42	..Milk	..Deficient in fat	..Letter of warning.
66	..Milk	..Deficient in fat	..Letter of warning from Town Clerk.
71 & 82	..Butter (fresh)	..Contained excess water	..Informal samples. Further sample also adulterated. Letter from Town Clerk.
75	..Milk	..Slightly deficient in fat	..No further action taken.
79, 80 & 81	..Milk	..Deficient in fat	..Repeat sample also deficient "Appeal to cow" sample proved genuine. Letter of warning from Town Clerk.
139	..Milk	..Deficient in fat	..Letter of warning.

DAIRIES.

The number of dairymen registered in the City is 68. Of these 33 reside outside the City. The figure includes 7 City milk producers occupying 17 byres. There were 119 inspections made during the year, and premises and milking methods generally complied with the Milk and Dairies Order.

COMMON LODGING HOUSES.

There are 2 registered common lodging houses in the City, one of which is owned and managed by the Corporation. These 2 houses were registered during the year under the terms of the Public Health Act, 1936. Two other houses, improperly used for the purpose of a Common Lodging House, were reported upon.

REFUSE REMOVAL AND DISPOSAL.

This work has presented no unusual feature during the year. There is a twice or thrice weekly removal of domestic refuse, with a daily removal in the centre of the City, including a certain amount of trade refuse. 42 tons of saleable paper were salvaged, baled, and sold.

The Department has its own stables and garages, housing 13 horses and 7 freighters (5 of the horses are loaned to the City Surveyor for scavenging work).

Disposal was by controlled tipping at 6 points in the City, and is directed to reclamation of land liable to floods, recreation grounds, etc.

A small destructor, containing three steel units, is employed in the destruction of putrefactive refuse and rejected waste paper.

Twenty-five letters were written respecting irregularities in regard to collection or disposal services.

Particulars of costs, amount of refuse removed, etc., are in the appendix.

RAT REPRESSION.

Measures employed during the year to combat the rat menace included the employment of Cyanogas apparatus, the free issue of baits, and a payment of 2d. per head for dead rats. Payment for the latter during the year amounted to £25.

There were 250 inspections of premises, in consequence of complaint or otherwise, as a result of which 22 letters and 3 notices were addressed to persons having responsibility for the presence of the vermin.

During National Rat Week posters were exhibited on public hoardings, and on Corporation and local Transport Service vehicles. The Ministry of Health's sound film: "Your Enemy the Rat," was exhibited at two picture houses.

VAN DWELLERS.

There were no licences issued during the year under Section 269 of the Public Health Act, 1936. The 2 principal fairs, with their encampments, were held on The Sands, a site owned by the Corporation and provided with proper conveniences. During two weeks in July (Scottish Holidays), there were approximately 150 campers on 3 sites within the City, for short periods, who were provided with temporary accommodation.

HYGIENE OF PICTURE HOUSES, THEATRES, &c

Places of public entertainment were visited on 50 occasions, and conditions generally were satisfactory. One Picture House was entirely re-conditioned, and at another seating and ventilation were improved.

DUTIES UNDER MISCELLANEOUS ACTS.

Shops Acts and Orders.

653 day and evening inspections were made for the purpose of enforcing the Shops (Early Closing) Act, and as a result 30 letters of warning were addressed to shopkeepers.

Much attention was paid to the sanitary provisions of the Shops Act, 1934, no less than 520 visits being paid for this purpose. 45 notices were served requiring provision of sanitary or washing accommodation, increased ventilation, etc., and, in addition, many improvements were effected as a result of informal action.

Circulars and other information were in frequent demand at the office.

Merchandise Marks Act.

Frequent inspections were made to the market and shops with a view to securing proper designation of food stuffs, and verbal warnings given.

Fertilisers and Feeding Stuffs Act.

No request was made for samples to be taken under this Act, but 5 samples of cattle feeding stuffs were taken in the capacity of official sampler.

APPENDICES.

The following tables give the number of animals killed annually during the past five years :—

PUBLIC SLAUGHTER-HOUSES.

Year	Cattle	Sheep & Lambs	Calves	Pigs	Total
1934	4,744	19,038	466	5,691	29,939
1935	4,833	17,828	614	7,141	30,416
1936	4,848	21,019	328	7,213	33,408
1937	4,985	22,663	283	6,866	34,797
1938	4,944	19,209	249	6,830	31,232

L.M. & S. RAILWAY SLAUGHTER-HOUSE.

1934	—	39,326	—	—	39,326
1935	—	34,785	—	—	34,785
1936	—	49,609	—	—	49,609
1937	—	30,248	—	—	30,248
1938	—	41,807	—	—	41,807

L. & N.E. RAILWAY SLAUGHTER-HOUSE.

1934	—	32,936	—	—	32,936
1935	—	35,197	—	—	35,197
1936	—	29,965	—	—	29,965
1937	—	27,857	—	—	27,857
1938	—	28,898	—	—	28,898

HARRABY BACON FACTORY.

1934	—	—	—	13,540	13,540
1935	—	—	—	36,388	36,388
1936	—	—	—	36,889	36,889
1937	—	—	—	29,109	29,109
1938	—	—	—	33,064	33,064

PUBLIC SLAUGHTER HOUSES.**Table showing incidence of Tuberculosis in Food Animals.**

ANIMAL.	No. Slaughtered	No. Affected.	Percentage.	Amount unfit for food.		
				Whole Carcases.	Part Carcases.	Offal.
Cows	1293	247	19.1	39	30	178
Other Cattle	3651	192	5.2	12	13	167
Calves	249	2	.8	2	—	—
Pigs	6830	355	5.1	3	327	25
Total	12023	796		56	370	370

Table showing number of Carcases and Part Carcases. condemned for diseases other than Tuberculosis.

DISEASE OR CONDITIONS	Unfit for Food.							
	Whole Carcases.				Part Carcases.			
	Cattle.	Sheep.	Pigs.	Calves.	Cattle.	Sheep.	Pigs.	Calves.
Pneumonia, Pleurisy, &c. ..	—	2	—	—	1	14	2	—
Joint Ill	—	—	—	6	—	—	—	—
Dropsy	—	5	—	—	—	—	—	—
Abcesses	3	—	3	—	5	4	4	—
Febrile Condition	2	6	2	—	2	3	2	—
Malignant	1	1	—	—	—	—	—	—
Rheumatism	—	—	—	—	2	5	3	—
Oedema	—	1	—	—	—	3	—	—
Septicæmia Jaundice	1	3	—	—	2	1	—	—
Putrefaction Emaciation ..	—	12	2	2	1	4	4	—
Nephritis	1	—	—	—	—	—	1	—
Accident, Bruises, &c. ..	1	4	—	—	17	10	24	—
Pigmentation	—	—	—	—	—	—	1	—
Atrophy	—	—	—	—	2	2	1	—
Parasitic	—	2	—	—	—	—	—	—
Immaturity	—	1	1	6	—	—	—	—
Peritonitis	—	2	—	—	1	2	1	—
Necrosis	—	—	—	—	1	—	—	—
Scour	—	—	—	1	—	—	—	—
Actinomycosis	—	—	—	—	1	—	—	—
Whole Carcases	9	39	8	15	—	—	—	—
Part Carcases	—	—	—	—	35	48	43	—

DISEASED AND UNSOUND FOOD.

The following table shows the amount of food declared to be unfit for consumption during 1938 :—

PUBLIC ABATTOIR.				Tons Cwts. Qrs. Lbs.*			
Beef	..	..	..	20	2	0	16
Offals	..	..	..	22	10	3	5
Mutton	..	..	..	1	2	1	21
Offals	..	..	..	—	6	0	4
Veal	..	..	..	—	6	0	11
Offals	..	..	..	—	1	2	19
Pork	..	..	..	2	9	1	24
Offals	..	..	..	—	17	0	27
				Tons Cwts. Qrs. Lbs			
				47 15 3 15			

HARRABY BACON FACTORY.				Tons Cwts. Qrs. Lbs.			
Pork	..	..	..	11	7	2	6
Offals	..	..	..	4	3	2	8
				Tons Cwts. Qrs. Lbs.			
				15 11 0 14			

OTHER SOURCES.							
Beef	..	..	..	..	58	lbs.	
Mutton	..	..	..	..	187	lbs.	
Bacon	..	..	..	..	22	lbs.	
Kippers	..	..	..	..	42	lbs.	
Tinned Meat	..	..	..	..	60	lbs.	
				Tons. Cwts. Qrs. Lbs.			
				— 3 1 5			
				Total ..63 10 2 6			

FOOD AND DRUGS.

Table showing nature of articles purchased, with results of analyses :—

Article	No. of Samples	No. found to be genuine	No. adulterated
Milk	36	26	10
Butter	29	27	2
Sausages	2	2	—
Cheese	6	6	—
Tinned Milk and Cream ..	7	7	—
Margarine	1	1	—
Fats and Lard	5	5	—
Tea and Coffee	12	12	—
Meat Foods	5	5	—
Jams and Jellies	7	7	—
Cocoa	2	2	—
Condiments and Spices ..	9	9	—
Bread & Flour Confectionery	9	9	—
Culinary, Jellies, Powders, Etc.	20	20	—
Beer, etc	3	3	—
Olive Oil	2	2	—
Total ..	155	143	12

FACTORIES, WORKSHOPS, WORKPLACES, AND HOMEWORK.

1.—Inspections for purposes of provisions as to health.

INSPECTIONS MADE BY SANITARY INSPECTORS.

Premises,	Number of		
	Inspections	Written Notices	Occupiers Prosecuted
FACTORIES with mechanical power	428	3	—
FACTORIES without mechanical power	500	7	—
*OTHER PREMISES under the Act (including works of building engineering construction but not including outworkers' premises	—	—	—
*Electrical Stations should be reckoned as factories. TOTAL	928	10	—

2.—Defects found,

Particulars,	Number of Defects.			Number of Defects in respect of which Prosecutions were Instituted
	Found	Remed'd.	Referred to H.M. Inspector	
Want of cleanliness (S. 1) ..	13	13	—	—
Overcrowding (S. 2) ..	—	—	—	—
Unreasonable temperature (S. 3)	—	—	—	—
Inadequate ventilation (S. 4)	—	—	—	—
Ineffective drainage of floors (S. 6)	—	—	—	—
Sanitary Conveniences (S. 7):				
Insufficient	2	1	—	—
Unsuitable or defective ..	9	7	—	—
Not separate for sexes ..	—	—	—	—
Other offences	—	—	—	—
(Not including offences relating to Home Work or offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921, and re-enacted in the Third Schedule to the Factories Act, 1937)				
TOTAL ..	24	21	—	—

Home Work.

NATURE OF WORK.	OUTWORKERS' LISTS, SECTION 110.					
	List received from Employers.					
	Sending twice in the year.			Sending once in the year.		
	Lists.	Outworkers.		Lists.	Outworkers.	
		Con-tractors	Work-men.		Con-tractors	Work-men.
Wearing apparel—						
Making, &c. ..	1	—	1	—	—	—
Cleaning and						
Washing ..	—	—	—	—	—	—
Total ..	1	—	1	—	—	—

Classified List of Factories.

	With Mechanical Power.	Without Mechanical Power.
Bakehouses	53	37
Boot Repairers, Cloggers, &c. .. .	29	19
Cabinet Makers, Upholsterers .. .	12	10
Coopers	—	2
Motor Engineers, Repairs, &c. .. .	62	16
Builders' Merchants, Yards, &c. .. .	57	—
Electrical and Heating Engineers .. .	20	14
Textiles	7	1
Engineers, Metal Workers	26	2
Metal Box Manufacturers	1	—
Printers and Bookbinders	13	—
Leather Manufacturers, Saddlers, &c. .. .	2	4
Electrical Power Plant and Distribution	2	—
Gas Distribution	1	—
Sewage Purification	1	—
Dressmakers, &c.	4	43
Dyers and Cleaners	8	—
Fishing Tackle Makers	1	2
Opticians	1	5
Photographers	1	6
Jewellers and Watch Repairers	3	12
Aerated Water Manufacturers	5	—
Butter Blenders	2	—
Milk Pasteurisation and Drying	3	—
Brewers and Bottlers	3	—
Manufacturing Confectioner	1	—
Tripe Boiler	—	1
Gut Scraper	—	1
Marine Stores	—	3
Meat Preparation	—	85
Corn Millers	6	—
Cold Storage and Ice Makers	2	—
Tailors	1	28
Railway Depots	5	—
Small Miscellaneous Factories	25	26
Totals	357	317

REFUSE REMOVAL.

Table showing Costs for the year ended 31st March, 1938.

ITEM	PARTICULARS	Loan Charges, depreciation, revenue contributions to capital outlay, and rents.					
		(A) Inclusive.			(B) Exclusive.		
		COLLECTION		DISPOSAL		COLLECTION AND DISPOSAL	
(1)	(2)	(A) (3)	(B) (4)	(A) (5)	(B) (6)	(A) (7)	(B) (8)
		£	£	£	£	£	£
REVENUE ACCOUNT.							
1	Gross Expenditure	9762	9535	3184	2838	12946	12373
2	Gross Income ..	57	57	99	99	156	156
3	Net Cost	9705	9478	3085	2739	12790	12217
UNIT COSTS.							
		s.	d.	s.	d.	s.	d.
4	Gross Expenditure	8	2.42	8	0.17	2	8.11
	per ton						
5	Gross Income per		.57		.57		.99
	ton						
6	Net cost per ton ..	8	1.85	7	11.30	2	7.12
7	Net cost, per 1,000	163	1/7	159	2/4	51	16/10
	population						
8	Net cost, per 1,000						
	houses or pre-						
	misses from which	508	19/11	497	1/10	161	16/0
	refuse is collec-						
	ted						
9	Total refuse collected (in tons)	Estimated				23,800	
10	Population ; Middle of 1937- according to the Registrar-General's estimate					59,510	
11	Area (Statute acres)—Land and inland water					4,488	
12	Weight (in cwts.) per 1,000 population per day (365 days to year)					21.9	
13	Number of houses and premises					19,067	

	No. of Vehicles.	Percentage of refuse collected
Horse vehicles	7	30
Mechanical vehicles.. ..	8	70



